

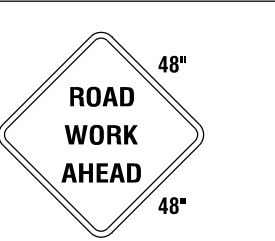
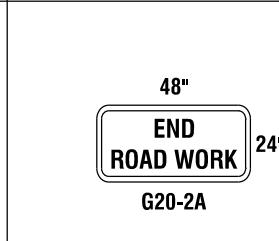
INDEX

[illegible]

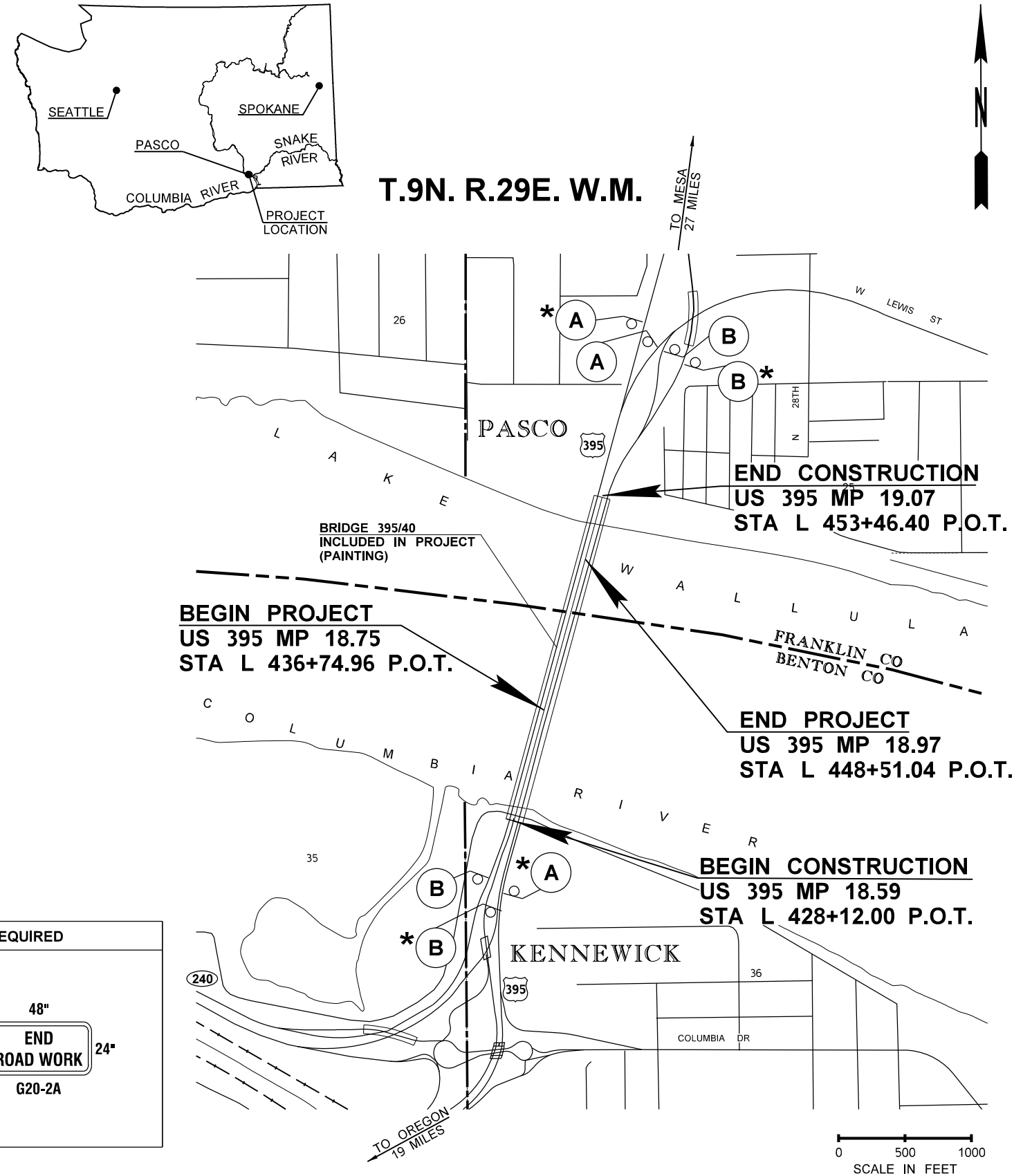
	PLAN
	REFERENCE
	NO.
	SHEET
	OF
	SHEETS


NOTE: ALL SHEET REFERENCES, FIRST NOS. OF STRUCTURE CODE DESIGNATIONS AND MATCH LINE SHEET REFERENCES, ETC., THROUGHOUT THE PLANS, REFER TO THE ENTRY IN THE PLAN REFERENCE NUMBER BOX.

EXISTING UTILITIES			
MP TO MP	SIDE	DESCRIPTION	OWNER
18.59 TO 19.07	RT	TELEVISION CABLE	CHARTER COMMUNICATIONS

<p>A 3 REQUIRED</p>	<p>B 4 REQUIRED</p>
 <p>Diagram of a diamond-shaped sign (W20-1) with the text "ROAD WORK AHEAD". The sign is 48" wide and 48" high.</p>	 <p>Diagram of a rectangular sign (G20-2A) with the text "END ROAD WORK". The sign is 48" wide and 24" high.</p>

* GATED



FILE NAME K:\454306\Projects\XL6475-US395_MP18.75-MP18.97_PaintingS2\CAD\ContractPlans_Alt010-Index\XL6475_INVN.dgn										Plot 1	
TIME 8:30:20 AM						REGION NO.		STATE		FED.AID PROJ.NO. NHPP-0395(122)	
DATE 4/20/2023						10		WASH			
PLOTTED BY GunderC						JOB NUMBER		23Y006			
DESIGNED BY C. GUNDERT						CONTRACT NO.		LOCATION NO.		 <p>Washington State Department of Transportation</p>	
ENTERED BY C. GUNDERT											
CHECKED BY P. COOPER											
PROJ. ENGR. A. SANGUINO											
REGIONAL ADM. C. KEIFENHEIM		REVISION		DATE		BY				<p>DATE</p> <p>P.E. STAMP BOX</p>	
										<p>DATE</p> <p>P.E. STAMP BOX</p>	
INDEX / VICINITY MAP / CLASS A										<p>US 395</p> <p>PIONEER MEMORIAL BRIDGE -</p> <p>BRIDGE PAINTING STAGE 2</p>	
										<p>SHEET 1 OF 23 SHEETS</p>	

PROJECT LICENSED PROFESSIONAL CERTIFICATES

Greg Banks

Greg Banks (Apr 25, 2023 14:37 PDT)

Greg Banks

Apr 25, 2023

AS A LICENSED PROFESSIONAL IN DIRECT RESPONSIBLE CHARGE
OF DEVELOPING THIS CONTRACT, I CERTIFY THAT ALL PLANS
THAT CONTAIN MY STAMP HAVE BEEN DEVELOPED UNDER MY
SUPERVISION.

AS A LICENSED PROFESSIONAL IN DIRECT RESPONSIBLE CHARGE
OF DEVELOPING THIS CONTRACT, I CERTIFY THAT ALL PLANS
THAT CONTAIN MY STAMP HAVE BEEN DEVELOPED UNDER MY
SUPERVISION.

AS A LICENSED PROFESSIONAL IN DIRECT RESPONSIBLE CHARGE
OF DEVELOPING THIS CONTRACT, I CERTIFY THAT ALL PLANS
THAT CONTAIN MY STAMP HAVE BEEN DEVELOPED UNDER MY
SUPERVISION.

AS A LICENSED PROFESSIONAL IN DIRECT RESPONSIBLE CHARGE
OF DEVELOPING THIS CONTRACT, I CERTIFY THAT ALL PLANS
THAT CONTAIN MY STAMP HAVE BEEN DEVELOPED UNDER MY
SUPERVISION.

AS A LICENSED PROFESSIONAL IN DIRECT RESPONSIBLE CHARGE
OF DEVELOPING THIS CONTRACT, I CERTIFY THAT ALL PLANS
THAT CONTAIN MY STAMP HAVE BEEN DEVELOPED UNDER MY
SUPERVISION.

AS A LICENSED PROFESSIONAL IN DIRECT RESPONSIBLE CHARGE
OF DEVELOPING THIS CONTRACT, I CERTIFY THAT ALL PLANS
THAT CONTAIN MY STAMP HAVE BEEN DEVELOPED UNDER MY
SUPERVISION.

AS A LICENSED PROFESSIONAL IN DIRECT RESPONSIBLE CHARGE
OF DEVELOPING THIS CONTRACT, I CERTIFY THAT ALL PLANS
THAT CONTAIN MY STAMP HAVE BEEN DEVELOPED UNDER MY
SUPERVISION.

AS A LICENSED PROFESSIONAL IN DIRECT RESPONSIBLE CHARGE
OF DEVELOPING THIS CONTRACT, I CERTIFY THAT ALL PLANS
THAT CONTAIN MY STAMP HAVE BEEN DEVELOPED UNDER MY
SUPERVISION.

AS A LICENSED PROFESSIONAL IN DIRECT RESPONSIBLE CHARGE
OF DEVELOPING THIS CONTRACT, I CERTIFY THAT ALL PLANS
THAT CONTAIN MY STAMP HAVE BEEN DEVELOPED UNDER MY
SUPERVISION.

AS A LICENSED PROFESSIONAL IN DIRECT RESPONSIBLE CHARGE
OF DEVELOPING THIS CONTRACT, I CERTIFY THAT ALL PLANS
THAT CONTAIN MY STAMP HAVE BEEN DEVELOPED UNDER MY
SUPERVISION.

AS A LICENSED PROFESSIONAL IN DIRECT RESPONSIBLE CHARGE
OF DEVELOPING THIS CONTRACT, I CERTIFY THAT ALL PLANS
THAT CONTAIN MY STAMP HAVE BEEN DEVELOPED UNDER MY
SUPERVISION.


AS A LICENSED PROFESSIONAL IN DIRECT RESPONSIBLE CHARGE
OF DEVELOPING THIS CONTRACT, I CERTIFY THAT ALL PLANS
THAT CONTAIN MY STAMP HAVE BEEN DEVELOPED UNDER MY
SUPERVISION.

NOTES:

THIS PLAN SET WAS DEVELOPED ELECTRONICALLY UNDER THE DIRECT SUPERVISION
OF THE LICENSED PROFESSIONALS THAT HAVE AFFIXED THEIR SIGNATURE TO THIS PAGE.

THIS SHEET SERVES AS THE CERTIFICATION BY THE ABOVE LICENSED PROFESSIONALS
OF ALL SHEETS IN THIS PLAN SET WHERE THEIR STAMPS AND SIGNATURES APPEAR.

FILE NAME K:\454306\Projects\XL6475-US395_MP18.75-MP18.97_PalntingS2\CAD\ContractPlans_Alt\015-Certffication\XL6475_PS_CT.dgn										Plot 1	
TIME 8:30:22 AM								REGION NO.	STATE	FED.AID PROJ.NO.	
DATE 4/20/2023								10	WASH		
PLOTTED BY GunderC								JOB NUMBER			
DESIGNED BY C. GUNDERT								23Y006		LOCATION NO.	
ENTERED BY C. GUNDERT								CONTRACT NO.			
CHECKED BY P. COOPER											
PROJ. ENGR. A. SANGUINO											
REGIONAL ADM. C. KEIFENHEIM				REVISION		DATE		BY			



Washington State
Department of Transportation

US 395
PIONEER MEMORIAL BRIDGE -
BRIDGE PAINTING STAGE 2

CERTIFICATION SHEET

PLAN REF NO
CT1

SHEET
2
OF
23
SHEETS

DATE

P.E. STAMP BOX

DATE

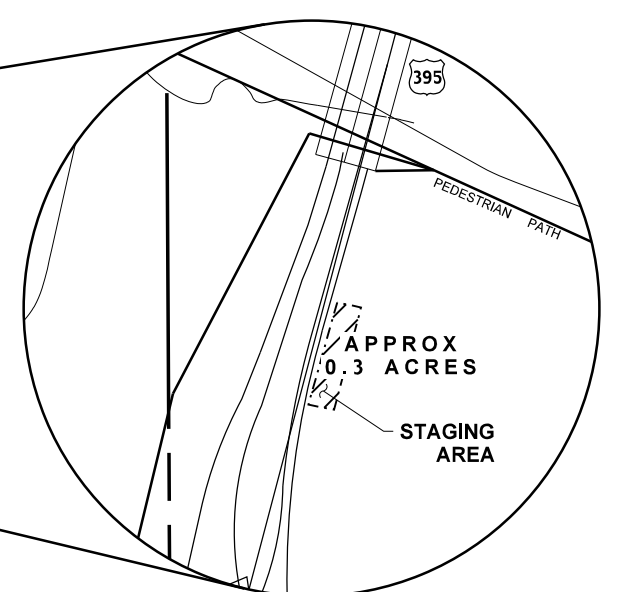
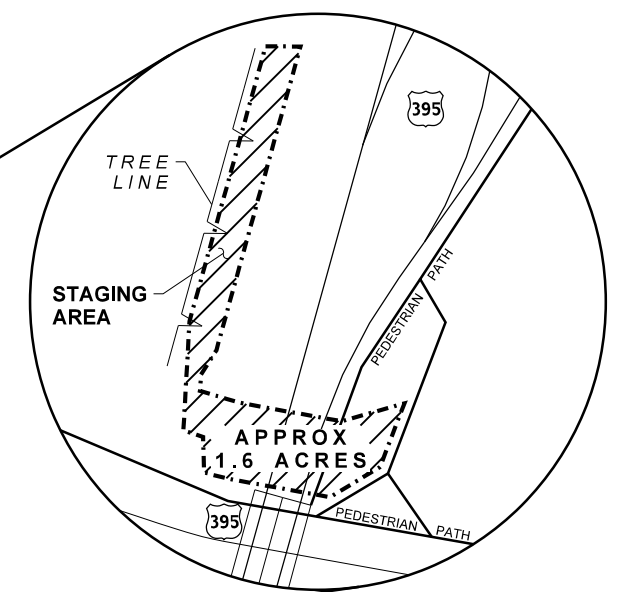
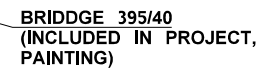
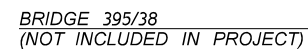
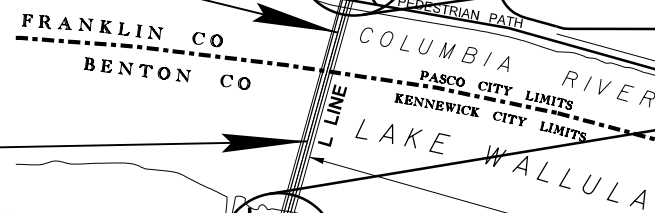
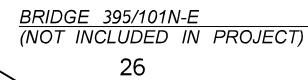
P.E. STAMP BOX

SUMMARY OF QUANTITIES


[illegible]

GROUP LEGEND	GROUP NUMBER	SR	CONTROL SECTION	TAX SCHEDULE	FUND PARTICIPANTS
	1	395	033210	**	STATE, FEDERAL NHPP-MVA
	2	395	110410	**	STATE, FEDERAL NHPP-MVA
	3	395	033210	**	CHARTER UTB1538
	4	395	110410	**	CHARTER UTB1538
	5	395	033210	**	STATE THIRD PARTY

			REGION	STATE	FEDERAL AID PROJECT. NO.	Washington State Department of Transportation	US 395 PIONEER MEMORIAL BRIDGE - BRIDGE PAINTING STAGE 2	SQ1
			10	WA	NHPP-0395(122)			
			JOB NUMBER 23Y006/2					
			CONTRACT NO 000000					
DATE	REVISION	BY						
							SUMMARY OF QUANTITIES	



A horizontal scale bar with three tick marks. The first tick mark is at the left end and is labeled '0'. The second tick mark is in the middle and is labeled '1000'. The third tick mark is at the right end and is labeled '2000'. Below the scale bar, the text 'SCALE IN FEET' is centered.

FILE NAME K:\454306\Projects\XL6475-US395-MP18.75-MP18.97_PaintIngS2\CAD\ContractPlans_Alt\070-StagIngPlan\XL6475_PS_SA.dgn										Plot 1	
TIME	8:30:24 AM				REGION NO.	STATE	FED.AID PROJ.NO.			PLAN REF NO.	
DATE	4/20/2023				10	WASH				SA1	
PLOTTED BY	GunderC				JOB NUMBER						
DESIGNED BY	C. GUNDERT				23Y006		LOCATION NO.			SHEET 4 OF 23 SHEETS	
ENTERED BY	C. GUNDERT				CONTRACT NO.						
CHECKED BY	P. COOPER										
PROJ. ENGR.	A. SANGUINO						<div><div><p>Washington State Department of Transportation</p></div><div><p>US 395 PIONEER MEMORIAL BRIDGE - BRIDGE PAINTING STAGE 2</p></div></div>				
REGIONAL ADM.	C. KEIFENHEIM										
REVISION		DATE	BY				STAGING PLAN				

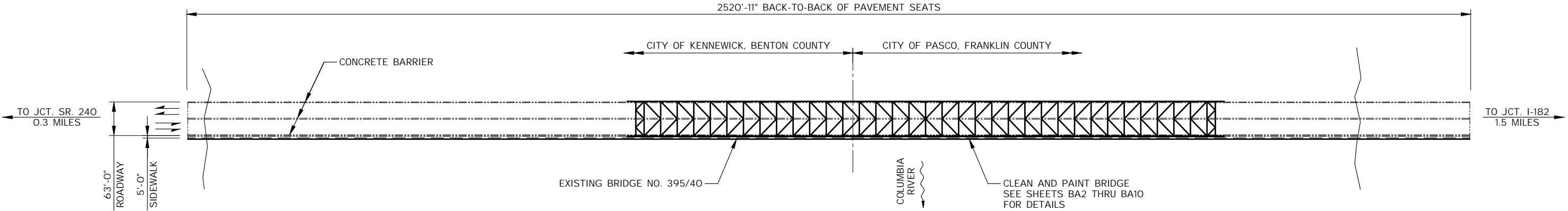
SEC'S 25 & 36, T. 9 N., R. 29 E., W.M.
CITY OF KENNEWICK AND CITY OF PASCO

US-395

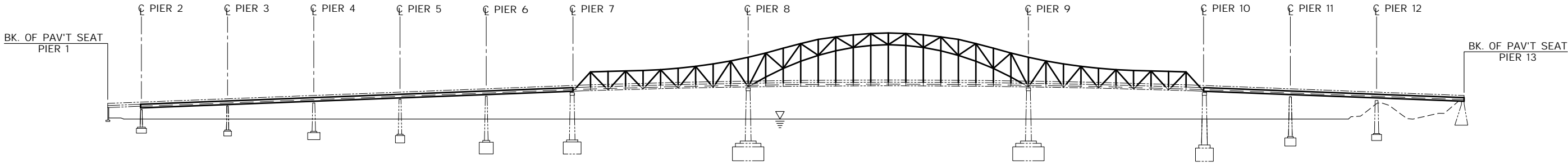


GENERAL NOTES

1. ALL MATERIALS AND WORKMANSHIP SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS OF THE WASHINGTON STATE DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROAD, BRIDGE AND MUNICIPAL CONSTRUCTION, DATED 2023.
2. THE DIMENSIONS SHOWN ON THE PLANS ARE BASED ON ORIGINAL DESIGN DRAWINGS. ALL RELEVANT DETAILS AND DIMENSIONS SHALL BE FIELD MEASURED AND VERIFIED BY THE CONTRACTOR PRIOR TO ORDERING MATERIALS AND PROCEEDING WITH CONSTRUCTION.
3. EXISTING VERTICAL CLEARANCE SHALL BE MAINTAINED OVER LIVE TRAFFIC LANES.
4. PAINTING SHALL BE COMPLETED IN ACCORDANCE WITH STANDARD SPECIFICATION SECTION 6-07 AND THE PROJECT SPECIAL PROVISIONS.
5. ALL STEEL SURFACES REQUIRE FULL PAINT REMOVAL PRIOR TO APPLYING NEW PAINT SYSTEM. SEE STANDARD SPECIFICATION SECTION 6-07.3(10)E FOR SURFACE PREPARATION.
6. EXISTING NAVIGATION AND CLEARANCE LIGHTS MUST BE MAINTAINED AND REMAIN VISIBLE TO WATERCRAFT AND AIRCRAFT THROUGHOUT THE DURATION OF THE PAINTING PROJECT.





PLAN

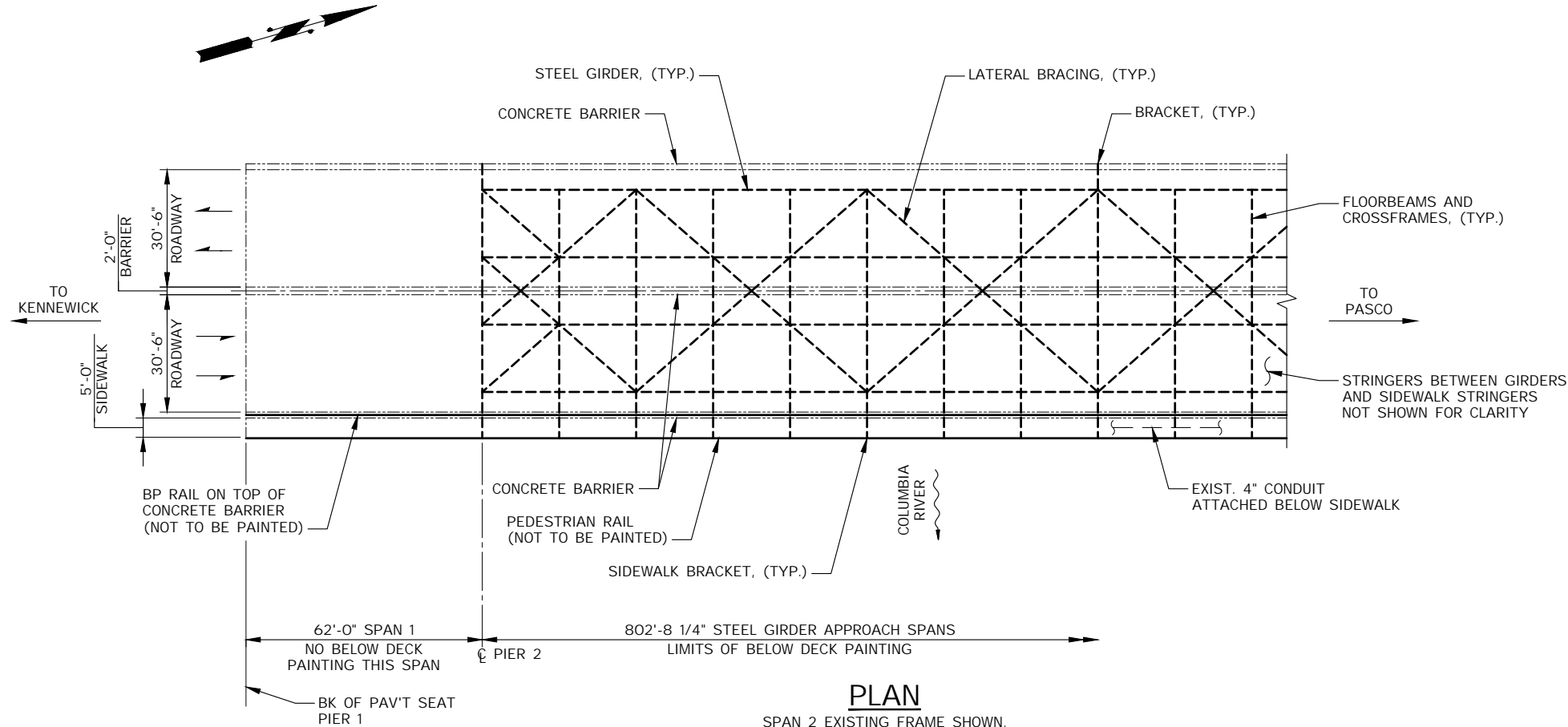


ELEVATION

BRIDGE PAINTING

Bridge Design Engr. Leland, A.				REGION NO.	STATE	FED AID PROJ NO.	BRIDGE AND STRUCTURES OFFICE	   <p>WSP USA Inc. 33301 9th Avenue South Suite 300 Federal Way, WA 98003-2600 TEL: (206) 431-2300 FAX: (206) 431-2250</p>	US 395 PIONEER MEMORIAL BRIDGE - BRIDGE PAINTING STAGE 2 BRIDGE NO. 395/40	BRIDGE SHEET NO. BA1
Supervisor Banks, G.				10	WASH					
Designed By Wu, J.										
Checked By Murphy, S.										
Detailed By Childress, L.										
Bridge Projects Engr. Rosa, M.				JOB NUMBER 23Y006					LAYOUT	SHEET 5 OF 23 SHEETS
Prelim. Plan By										
Architect/Specialist	DATE	REVISION	BY							

Childrens: Lee on: 4/19/2023 8:20 AM File: C:\Users\USL0875361\WSP 0365NW Bridge Group - Projects\30902017000\CADD\Drawings\02_BA02.dwg
SR JOB NO. SHEET

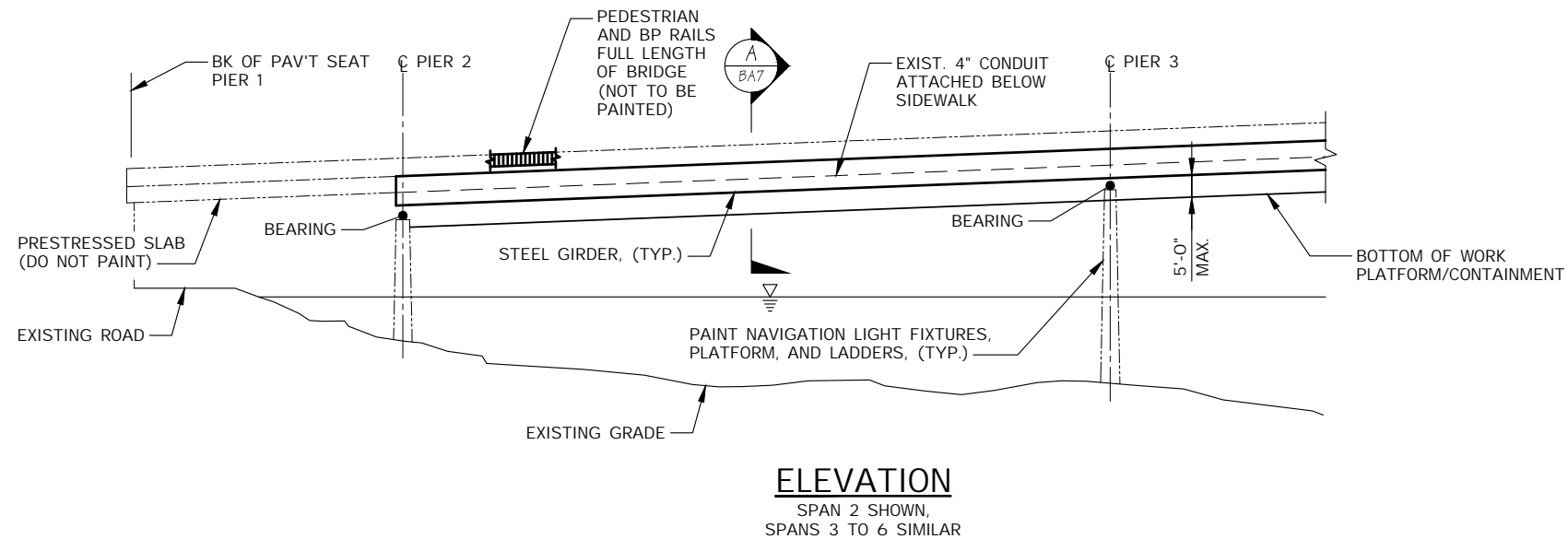


NOTES

1. SEE GENERAL NOTES ON BRIDGE SHEET BA1.
2. SEE RIVET EVALUATION AND REPLACEMENT NOTES ON BRIDGE SHEET BA10.
3. ALL BELOW DECK STEEL SHALL BE CLEANED AND PAINTED. PAINT SHALL BE GRAY (COLOR 26622).

LEGEND

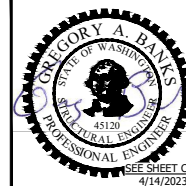
- NOT PAINTED
- PAINTED



Bridge Design Engr.	Leland, A.				REGION NO.	STATE	FED AID PROJ NO.
Supervisor	Banks, G.				10	WASH	
Designed By	Wu, J.						
Checked By	Murphy, S.						
Detailed By	Childress, L.				JOB NUMBER		
Bridge Projects Engr.	Rosa, M.				23Y006		
Prelim. Plan By							
Architect/Specialist		DATE	REVISION	BY			

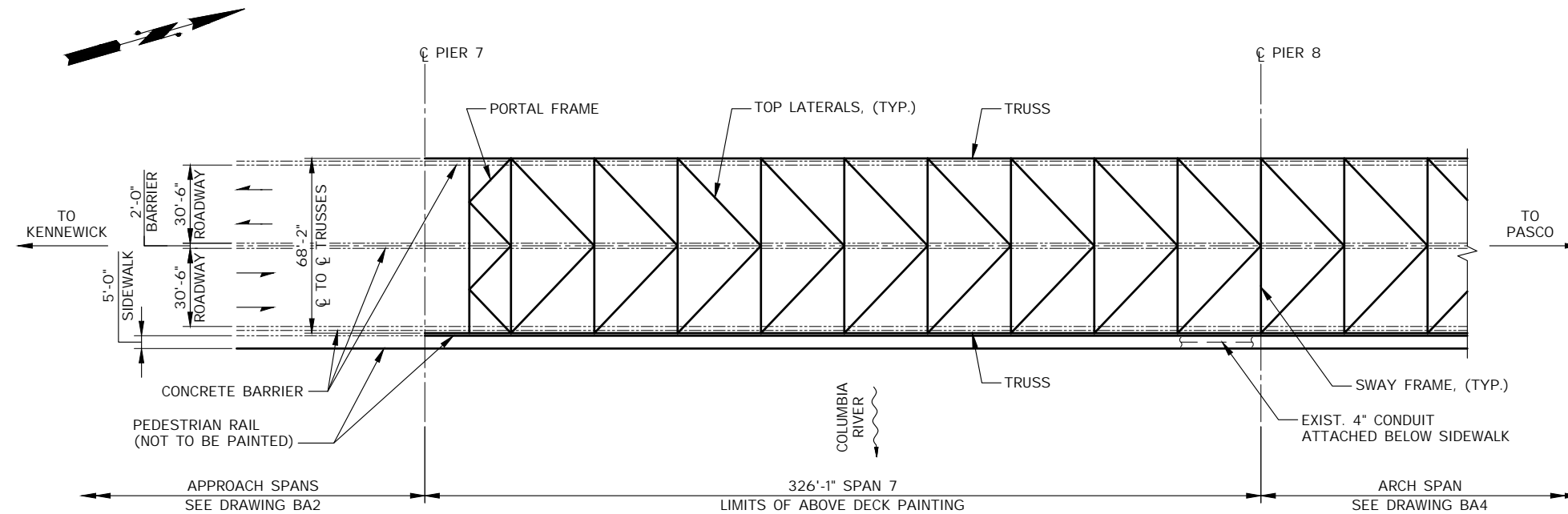
REGION NO.	STATE	FED AID PROJ NO.
10	WASH	
JOB NUMBER		
23Y006		

BRIDGE
AND
STRUCTURES
OFFICE

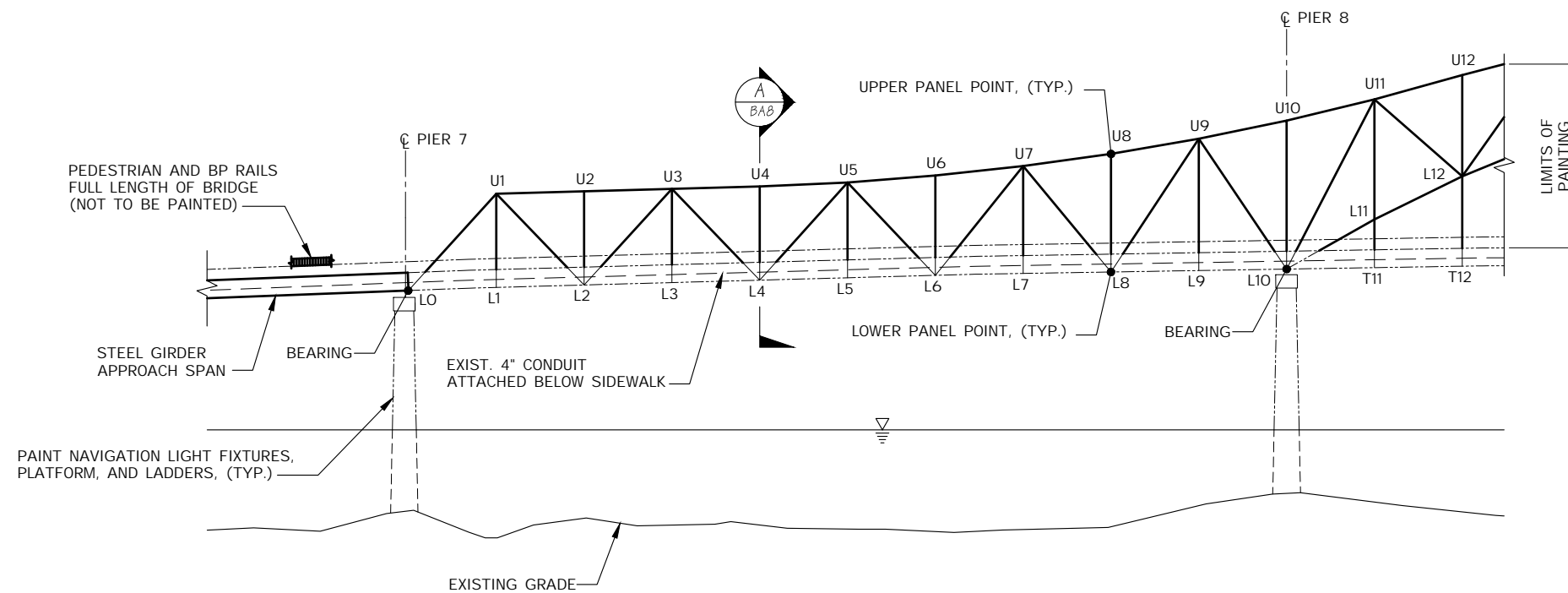


US 395
PIONEER MEMORIAL BRIDGE -
BRIDGE PAINTING STAGE 2
BRIDGE NO. 395/40
PLAN AND ELEVATION - SPANS 1 TO 6

BRIDGE
SHEET
NO.
BA2
SHEET
6
OF
23
SHEETS



PLAN

ELEVATION

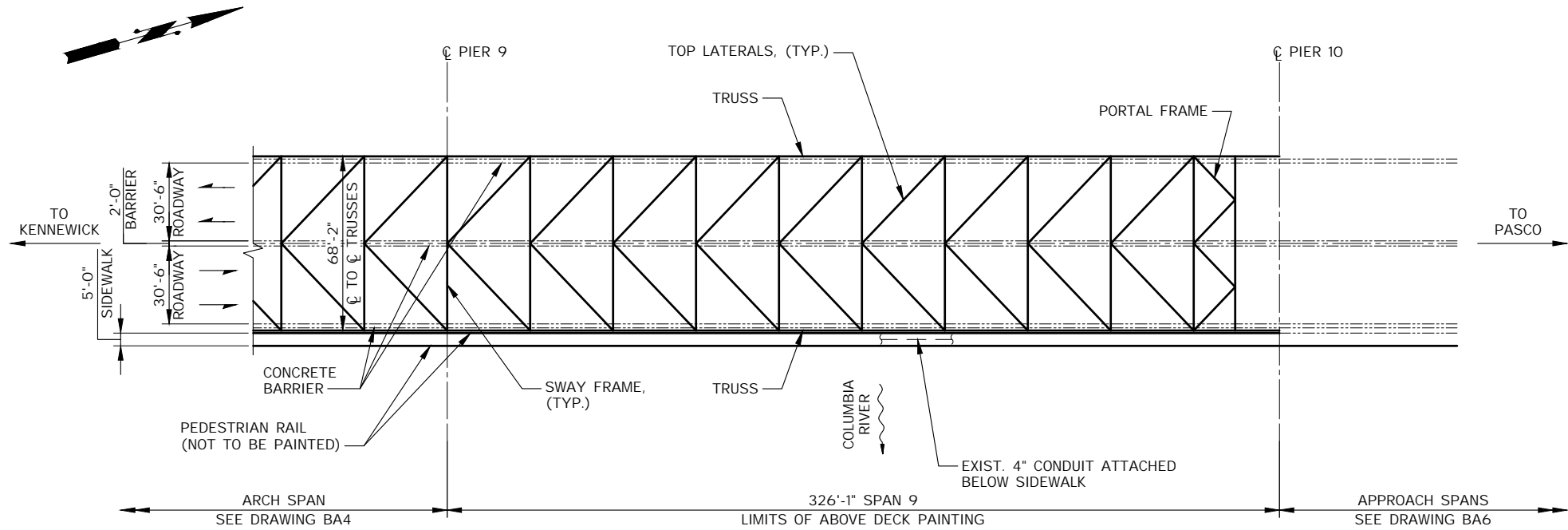
NOTES

1. SEE GENERAL NOTES ON BRIDGE SHEET BA1.
2. SEE RIVET EVALUATION AND REPLACEMENT NOTES ON BRIDGE SHEET BA10.
3. ALL ABOVE DECK STEEL SHALL BE CLEANED AND PAINTED EXCEPT EXPANSION JOINTS, SIGNS AND LIGHT STANDARDS. PAINT SHALL BE SKY BLUE (COLOR 25240).

LEGEND

----- NOT PAINTED
———— PAINTED

Bridge Design Engr. Leland, A.				REGION NO.	STATE	FED AID PROJ NO	<div>BRIDGE AND STRUCTURES OFFICE</div>	<div><div><div><div><div><div></div><div>GRIGORY A. BANKS</div><div>STATE OF WASHINGTON</div><div>PROFESSIONAL ENGINEER</div><div>45120</div><div>SEE SHEET C11</div><div>4/14/2023</div></div></div><div>WSP</div><div><div>WSP USA Inc. 33301 9th Avenue South Suite 300 Federal Way, WA 98003-2600 TEL: (206) 431-2300 FAX: (206) 431-2250</div></div></div></div><div><div><div><div><div></div><div>Washington State</div><div>Department of Transportation</div></div></div></div></div></div>	<div>US 395 PIONEER MEMORIAL BRIDGE - BRIDGE PAINTING STAGE 2 BRIDGE NO. 395/40 PLAN AND ELEVATION - SPAN 7</div>	<div>BRIDGE SHEET NO. BA3 SHEET 7 OF 23 SHEETS</div>
Supervisor Banks, G.				10	WASH					
Designed By Wu, J.										
Checked By Murphy, S.										
Detailed By Childress, L.				JOB NUMBER 23Y006						
Bridge Projects Engr. Rosa, M.										
Prelim. Plan By										
Architect/Specialist	DATE	REVISION	BY							



PLAN

NOTES

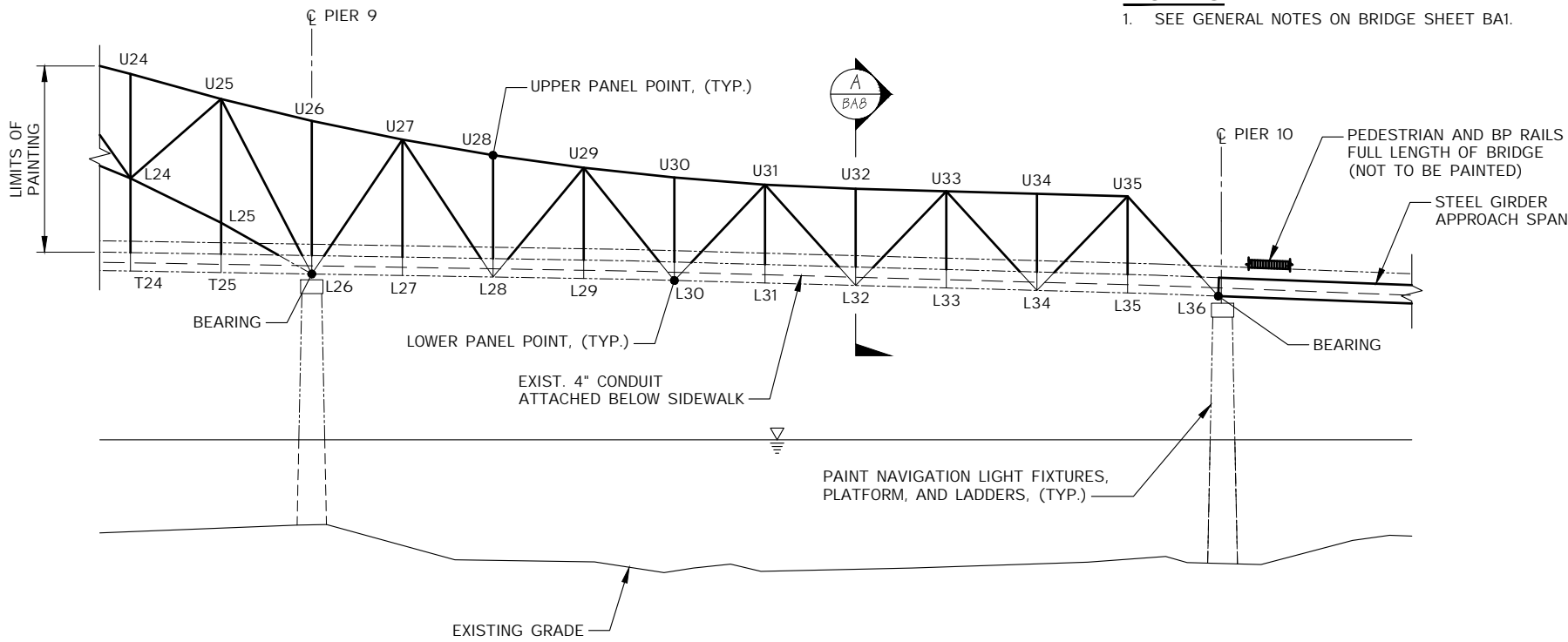
1. SEE GENERAL NOTES ON BRIDGE SHEET BA1.

NOTES

1. SEE GENERAL NOTES ON BRIDGE SHEET BA1.
2. SEE RIVET EVALUATION AND REPLACEMENT NOTES ON BRIDGE SHEET BA10.
3. ALL ABOVE DECK STEEL SHALL BE CLEANED AND PAINTED EXCEPT EXPANSION JOINTS, SIGNS AND LIGHT STANDARDS. PAINT SHALL BE SKY BLUE (COLOR 25240).

LEGEND

- NOT PAINTED
- PAINTED

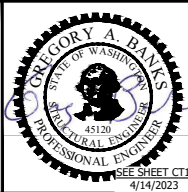


ELEVATION

Bridge Design Engr.	Leland, A.				
Supervisor	Banks, G.				
Designed By	Wu, J.				
Checked By	Murphy, S.				
Detailed By	Childress, L.				
Bridge Projects Engr.	Rosa, M.				
Prelim. Plan By					
Architect/Specialist		DATE	REVISION	BY	

REGION NO.	STATE	FED AID PROJ NO.
10	WASH	
JOB NUMBER		
23Y006		

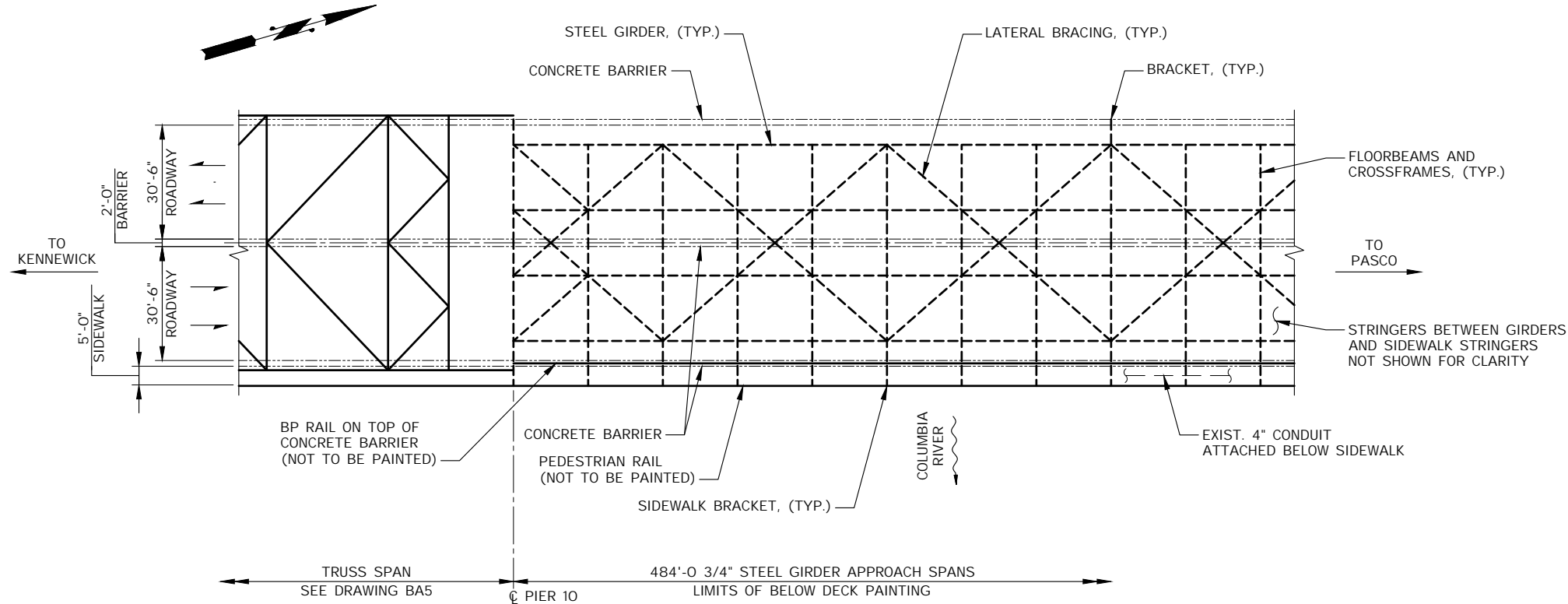
BRIDGE
AND
STRUCTURES
OFFICE



US 395
PIONEER MEMORIAL BRIDGE -
BRIDGE PAINTING STAGE 2
BRIDGE NO. 395/40
PLAN AND ELEVATION - SPAN 9

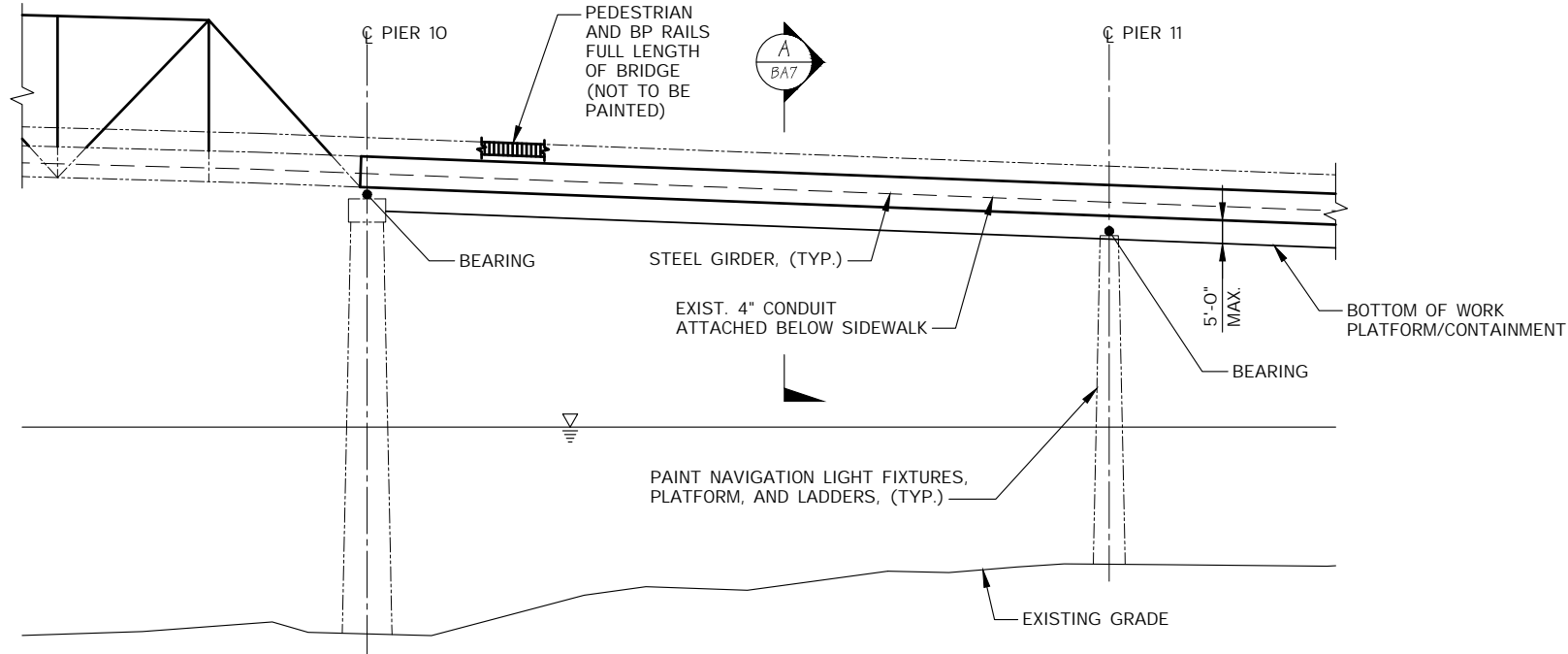
BRIDGE SHEET NO.	BA5
SHEET	9
OF	23
SHEETS	

Childrens: Lee on: 4/19/2023 8:20 AM File: C:\Users\USL\OneDrive\WSP\0365NW Bridge Group - Projects\30902017000\CADD\DWGs\02_BA06.dwg
SR JOB NO. SHEET



PLAN

SPAN 10 EXISTING FRAME SHOWN,
SPANS 11 AND 12 SIMILAR



ELEVATION

SPAN 10 SHOWN,
SPANS 11 AND 12 SIMILAR

NOTES

1. SEE GENERAL NOTES ON BRIDGE SHEET BA1.
2. SEE RIVET EVALUATION AND REPLACEMENT NOTES ON BRIDGE SHEET BA10.
3. ALL BELOW DECK STEEL SHALL BE CLEANED AND PAINTED. PAINT SHALL BE GRAY (COLOR 26622).

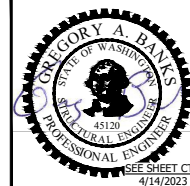
LEGEND

- NOT PAINTED
- PAINTED

Bridge Design Engr.	Leland, A.				
Supervisor	Banks, G.				
Designed By	Wu, J.				
Checked By	Murphy, S.				
Detailed By	Childress, L.				
Bridge Projects Engr.	Rosa, M.				
Prelim. Plan By					
Architect/Specialist					
	DATE	REVISION	BY		

REGION NO.	STATE	FED AID PROJ NO.
10	WASH	
JOB NUMBER		
23Y006		

BRIDGE
AND
STRUCTURES
OFFICE

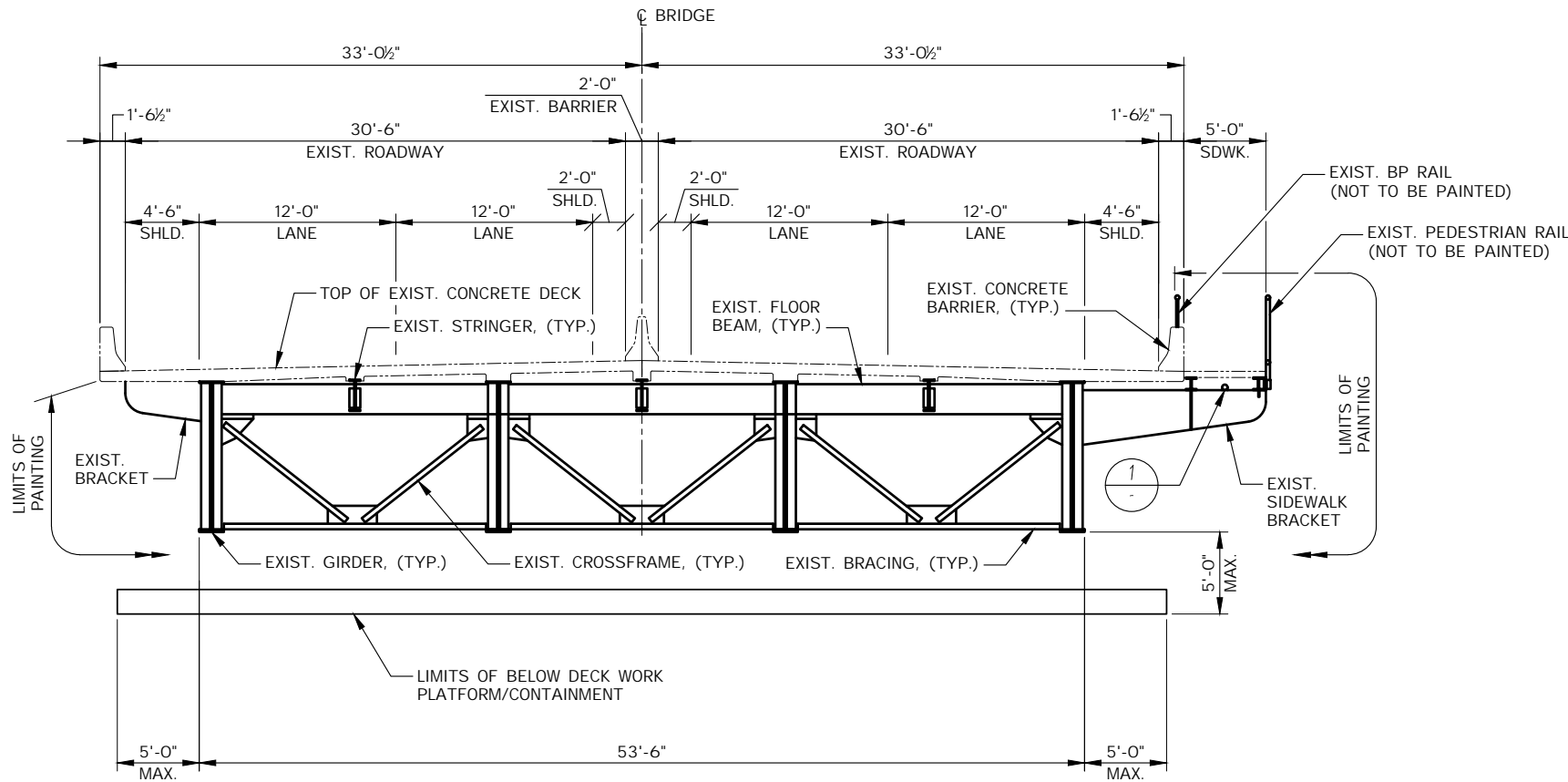


US 395
PIONEER MEMORIAL BRIDGE -
BRIDGE PAINTING STAGE 2
BRIDGE NO. 395/40

PLAN AND ELEVATION - SPANS 10 TO 12

BRIDGE SHEET NO.	BA6
SHEET	10
OF	23
SHEETS	

Childress, Lee on: 4/19/2023 8:20 AM File: C:\Users\USL0575361\WSP\0365NW Bridge Group - Projects\30902017000\CADD\DWGs\02_BA07.dwg
SR JOB NO. SHEET



TYPICAL STEEL GIRDER APPROACH SPAN SECTION
(SPANS 2 TO 6 AND 10 TO 12)

* WORK PLATFORM MAY NOT BE SUPPORTED BY EXISTING STRINGERS, BRACING, CROSSFRAMES OR FLOOR BEAMS.

A
BA2
BA6

NOTES

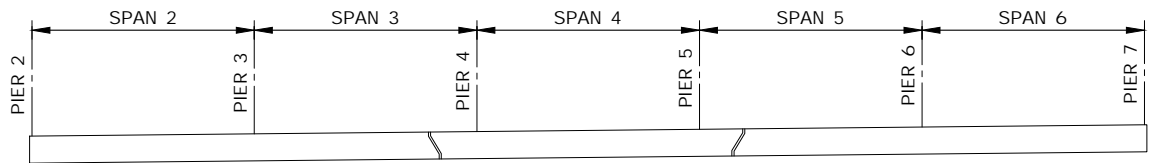
- SEE GENERAL NOTES ON BRIDGE SHEET BA1.
- SEE RIVET EVALUATION AND REPLACEMENT NOTES ON BRIDGE SHEET BA10.
- ALL BELOW DECK STEEL SHALL BE CLEANED AND PAINTED.

LEGEND

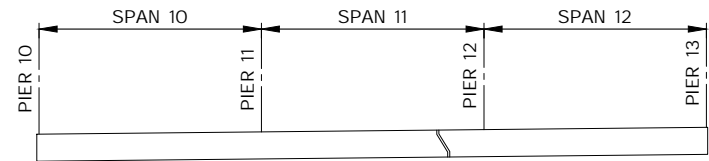
----- NOT PAINTED
————— PAINTED

CONSTRUCTION LOADING FOR STEEL GIRDER APPROACH SPANS

- TEMPORARY BELOW DECK WORK PLATFORM:
 - THE CONTRACTOR MAY SUPPORT A TEMPORARY BELOW-DECK WORK PLATFORM FROM THE GIRDERS. THE WIDTH OF THE PLATFORM SHALL NOT EXCEED THE OUT TO OUT WIDTH OF THE GIRDERS PLUS 5-FEET ON EITHER SIDE.
 - PLATFORMS MAY BE PLACED IN ANY APPROACH SPAN BEING PAINTED.

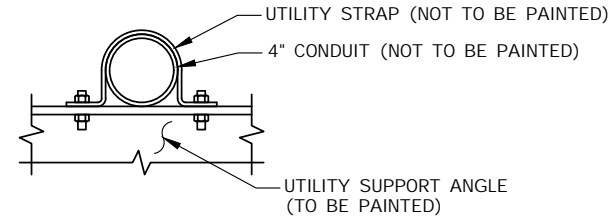


APPROACH SPANS 2 TO 6



APPROACH SPANS 10 TO 12

- THE TOTAL WEIGHT OF THE PLATFORM (SELF WEIGHT PLUS IMPOSED LOADS) SHALL NOT EXCEED 30 PSF.
 - THE PLATFORM MAY BE SUSPENDED FROM THE GIRDERS AT 25' MAXIMUM INTERVALS. THE PLATFORM SHALL BE SUPPORTED BY ALL FOUR GIRDER LINES. NO ATTACHMENT SHALL BE MADE TO FLOOR BEAMS, STRINGERS, CROSSFRAMES, LATERAL BRACING OR SIDEWALK BRACKETS. THE MAXIMUM UNFACTORED REACTION AT ANY ATTACHMENT POINT SHALL NOT EXCEED 10,000 POUNDS.
- VERTICAL COMPONENTS OF THE CONTAINMENT SYSTEM (TARPS) SHALL BE REMOVED WHEN WIND SPEEDS (GUSTS) EXCEED OR ARE FORECASTED TO EXCEED 40 MILES PER HOUR.
 - ATTACHMENT TO THE BRIDGE SHALL BE MADE WITH CLAMP OR PADDED WRAP TYPE CONNECTORS. HOLES SHALL NOT BE MADE IN BRIDGE MEMBERS. NO WELDING TO BRIDGE MEMBERS IS ALLOWED. METHODS OF ATTACHMENT TO THE BRIDGE SHALL BE SUBMITTED IN ACCORDANCE WITH THE STANDARD SPECIFICATION SECTION 6-07.3(2)F.
 - WORKING DRAWINGS AND CALCULATIONS (TYPE 2E) SHALL BE SUBMITTED IN ACCORDANCE WITH STANDARD SPECIFICATION SECTION 1-05.3. WORKING DRAWINGS AND CALCULATIONS SHALL SHOW THAT ALL THE ABOVE CONSTRAINTS HAVE BEEN MET. FOR ALL THE CONSTRUCTION LOADS. CONSTRUCTION LOADS SHALL NOT PLACED ON THE BRIDGE UNTIL THE ASSOCIATED WORKING DRAWINGS AND CALCULATIONS HAVE BEEN REVIEWED AND ACCEPTED BY WSDOT.
 - CONSTRUCTION VEHICLES OR EQUIPMENT ON THE DECK SHALL NOT EXCEED LEGAL LOAD LIMITS.
 - REMOVED PAINT, DEBRIS AND SPENT ABRASIVE BLAST MEDIA SHALL BE COLLECTED AND REMOVED FROM THE BRIDGE DAILY, AT A MINIMUM, TO KEEP UNNECESSARY WEIGHT OFF THE BRIDGE.



DETAIL

1

NOTES:

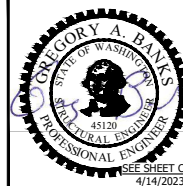
THE UTILITY STRAP SHALL BE REMOVED AND THE UTILITY MOVED ASIDE SO THAT THE UTILITY SUPPORT ANGLE CAN BE PAINTED. THE UTILITY SHALL BE PUT BACK IN PLACE AND ANCHORED WITH THE UTILITY STRAP ONCE PAINTING OF THE UTILITY SUPPORT ANGLE IS COMPLETE.

THE CONDUIT SHALL BE TEMPORARILY SECURED WHILE THE UTILITY STRAPS ARE REMOVED.

THE UTILITY SHALL REMAIN IN SERVICE.

Bridge Design Engr.	Leland, A.			REGION NO.	STATE	FED AID PROJ NO.
Supervisor	Banks, G.			10	WASH	
Designed By	Wu, J.					
Checked By	Murphy, S.					
Detailed By	Childress, L.					
Bridge Projects Engr.	Rosa, M.			JOB NUMBER		
Prelim. Plan By				23Y006		
Architect/Specialist		DATE	REVISION	BY		

BRIDGE
AND
STRUCTURES
OFFICE

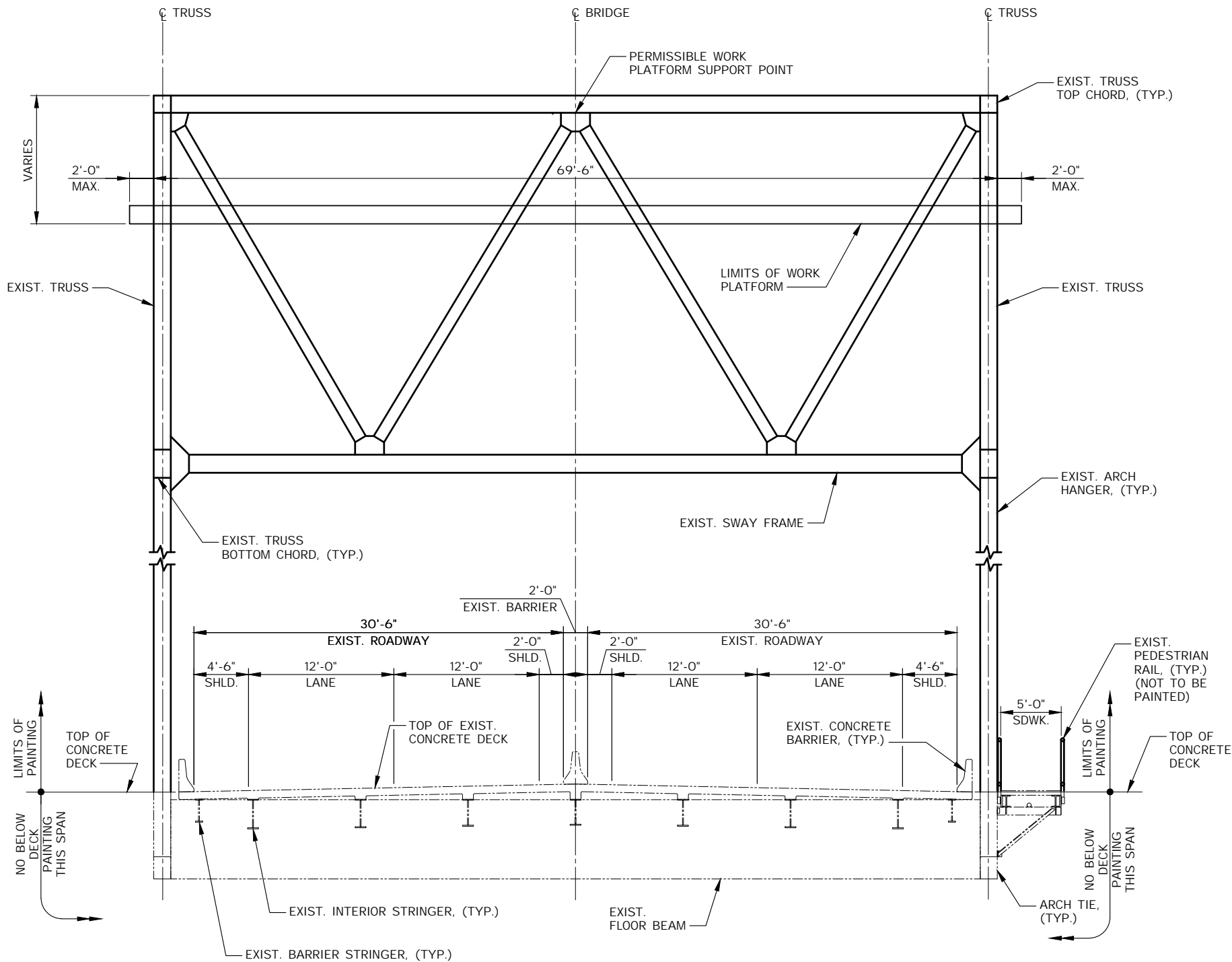


WSP USA Inc.
33301 9th Avenue South
Suite 300
Federal Way, WA 98003-2600
TEL: (206) 431-2300
FAX: (206) 431-2250

US 395
PIONEER MEMORIAL BRIDGE -
BRIDGE PAINTING STAGE 2
BRIDGE NO. 395/40
TYPICAL SECTION AND NOTES -
APPROACH SPANS

BRIDGE
SHEET NO.
BA7
SHEET
11
OF
23
SHEETS

Childrens, Lee on: 4/19/2023 8:21 AM File: C:\Users\USL087536\1WSP 0365NW Bridge Group - Projects\30902017000\CADD\DWGs\02_BA09.dwg
SR JOB NO. SHEET



NOTES

- SEE GENERAL NOTES ON BRIDGE SHEET BA1.
- SEE RIVET EVALUATION AND REPLACEMENT NOTES ON BRIDGE SHEET BA10.
- ALL ABOVE DECK STEEL SHALL BE CLEANED AND PAINTED EXCEPT EXPANSION JOINTS, SIGNS AND LIGHT STANDARDS.

LEGEND

- NOT PAINTED
————— PAINTED

CONSTRUCTION LOADING NOTES FOR ARCH SPAN

- TEMPORARY WORK PLATFORM:
 - THE CONTRACTOR MAY SUPPORT A TEMPORARY WORK PLATFORM FROM THE ARCH SPAN. THE WIDTH OF THE PLATFORM SHALL NOT EXCEED THE OUT TO OUT WIDTH OF THE TRUSSES PLUS 2-FEET ON EITHER SIDE.
 - THE PLATFORM MAY BE PLACED ANYWHERE IN ZONES A, B, C OR D AS SHOWN BELOW. HOWEVER, THE PLATFORM MAY NOT BE PLACED IN MORE THAN ONE ZONE AT THE SAME TIME.
- PIER 7
ZONE A
PIER 8
ZONE B
T18
ZONE C
PIER 9
ZONE D
PIER 10
- THE TOTAL WEIGHT OF THE PLATFORM (SELF WEIGHT PLUS IMPOSED LOADS) SHALL NOT EXCEED 15 PSF.
- THE WEIGHT OF CONTAINMENT AND ACCESS EQUIPMENT TRIBUTARY TO EACH UPPER TRUSS PANEL POINT SHALL NOT EXCEED 4,000 POUNDS AT EACH UPPER PANEL POINT IN ZONE B OR C.
- THE PLATFORM MAY BE SUSPENDED FROM THE TRUSS UPPER PANEL POINTS AND SWAY FRAME UPPER PANEL POINTS ONLY. NO ATTACHMENT SHALL BE MADE TO TRUSS OR SWAY FRAME MEMBERS BETWEEN PANEL POINTS. THE PLATFORM SHALL NOT BE ATTACHED TO TOP LATERALS OR ARCH HANGERS.
- THE MAXIMUM UNFACTORED REACTION AT ANY TRUSS PANEL POINT SHALL NOT EXCEED 22,000 POUNDS. THE MAXIMUM UNFACTORED REACTION AT ANY SWAY FRAME PANEL POINT SHALL NOT EXCEED 10,000 POUNDS.
- THE LOWEST POINT OF THE WORK PLATFORM SHALL NOT BE LOWER THAN 19'-0" ABOVE THE CONCRETE DECK.
- VERTICAL COMPONENTS OF THE CONTAINMENT SYSTEM (TARPS) SHALL BE REMOVED WHEN WIND SPEEDS (GUSTS) EXCEED OR ARE FORECASTED TO EXCEED 40 MILES PER HOUR.
- ATTACHMENT TO THE BRIDGE SHALL BE MADE WITH CLAMP OR PADDED WRAP TYPE CONNECTORS. HOLES SHALL NOT BE MADE IN BRIDGE MEMBERS. NO WELDING TO BRIDGE MEMBERS IS ALLOWED. METHODS OF ATTACHMENT TO THE BRIDGE SHALL BE SUBMITTED IN ACCORDANCE WITH THE STANDARD SPECIFICATION SECTION 6-07.3(2)F.
- WORKING DRAWINGS AND CALCULATIONS (TYPE 2E) SHALL BE SUBMITTED IN ACCORDANCE WITH STANDARD SPECIFICATION SECTION 1-05.3. WORKING DRAWINGS AND CALCULATIONS SHALL SHOW THAT ALL THE ABOVE CONSTRAINTS HAVE BEEN MET FOR ALL THE CONSTRUCTION LOADS. CONSTRUCTION LOADS SHALL NOT PLACED ON THE BRIDGE UNTIL THE ASSOCIATED WORKING DRAWINGS AND CALCULATIONS HAVE BEEN REVIEWED AND ACCEPTED BY WSDOT.
- CONSTRUCTION VEHICLES OR EQUIPMENT ON THE DECK SHALL NOT EXCEED LEGAL LOAD LIMITS.
- REMOVED PAINT, DEBRIS AND SPENT ABRASIVE BLAST MEDIA SHALL BE COLLECTED AND REMOVED FROM THE BRIDGE DAILY, AT A MINIMUM, TO KEEP UNNECESSARY WEIGHT OFF THE BRIDGE.

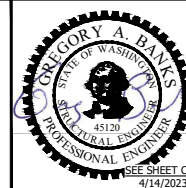
TYPICAL ARCH SPAN SECTION
(SPAN 8)



Bridge Design Engr.	Leland, A.				
Supervisor	Banks, G.				
Designed By	Wu, J.				
Checked By	Murphy, S.				
Detailed By	Childress, L.				
Bridge Projects Engr.	Rosa, M.				
Prelim. Plan By					
Architect/Specialist		DATE	REVISION	BY	

REGION NO.	STATE	FED AID PROJ NO.
10	WASH	
JOB NUMBER		
23Y006		

BRIDGE
AND
STRUCTURES
OFFICE



US 395
PIONEER MEMORIAL BRIDGE -
BRIDGE PAINTING STAGE 2
BRIDGE NO. 395/40
TYPICAL SECTION AND NOTES -
SPAN 8

BRIDGE SHEET NO.	BA9
SHEET	13
OF	23
SHEETS	

Childress, Lee on: 4/19/2023 8:21 AM File: C:\Users\USL\OneDrive\WSP\0365NW Bridge Group - Projects\30902017000\CADD\Drawings\02_BA10.dwg
SR JOB NO. SHEET

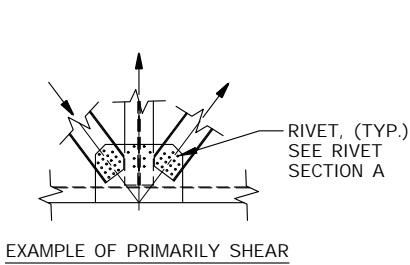
RIVET EVALUATION AND REPLACEMENT NOTES

- EXISTING RIVETS TO REMAIN ON MEMBERS AND/OR GUSSETS BEING PAINTED SHALL BE EVALUATED AFTER FIELD PREPARATION FOR PAINTING AND PRIMING IS COMPLETED AND SHALL BE REMOVED AND REPLACED IN ACCORDANCE WITH THE RIVET EVALUATION CRITERIA SHOWN ON THIS SHEET. NEW H.S. BOLTS SHALL BE INSTALLED AND TENSIONED IN ACCORDANCE WITH SECTION 6-03.3(33), AND PREPARED FOR PAINT IN ACCORDANCE WITH SECTION 6-07.3(1)A.
- BOLTS SHALL CONFORM TO ASTM F3125 GR A325 AND SHALL BE GALVANIZED. BOLTS REPLACING RIVETS SHALL HAVE A DIAMETER MATCHING THE DIAMETER OF THE RIVET THEY REPLACE. EXISTING HOLES MAY BE REAMED TO THE RIVET DIAMETER PLUS 1/8" MAXIMUM TO FACILITATE BOLT INSTALLATION IF NEEDED.
- UNLESS OTHERWISE SHOWN IN THE PLANS OR APPROVED BY THE ENGINEER, ONLY ONE RIVET MAY BE REMOVED AND REPLACED AT A TIME AT ANY CONNECTION. THE REPLACEMENT BOLT SHALL BE FULLY INSTALLED AND TENSIONED BEFORE THE NEXT RIVET MAY BE REMOVED.
- PRIOR TO STARTING ANY RIVET REMOVAL, THE CONTRACTOR SHALL SUBMIT A TYPE 2 WORKING DRAWING DETAILING PROPOSED RIVET REMOVAL METHODS TO THE ENGINEER. ACCEPTANCE WILL REQUIRE DEMONSTRATION BY THE CONTRACTOR TO ENSURE NO DAMAGE WILL OCCUR TO THE EXISTING MEMBER TO REMAIN. NO FLAME CUTTING METHODS WILL BE PERMITTED.

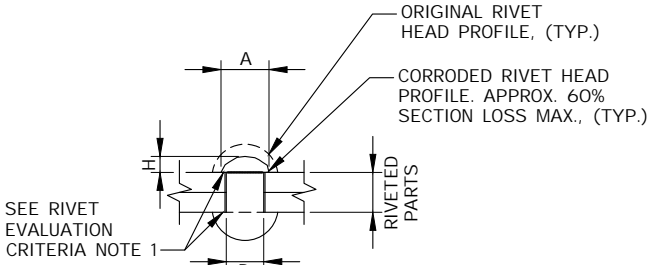
RIVET EVALUATION CRITERIA

RIVETS SHALL BE REPLACED IF THEY MEET ANY ONE OF THESE CRITERIA.

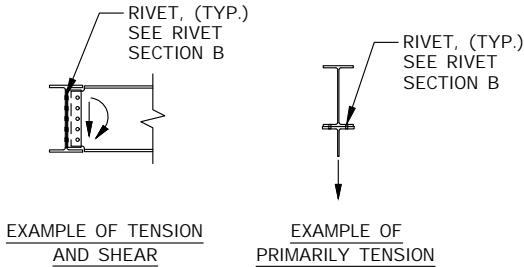
- REPLACE RIVET IF THERE IS SEPARATION BETWEEN THE SOUND METAL SURFACES OF EITHER RIVET HEAD AND THE RIVETED PARTS.
- REPLACE RIVET IF THE RIVET VISUALLY APPEARS TO BE LOOSE FOR ANY REASON. RIVETS VISUALLY SUSPECT OF BEING LOOSE SHALL BE CONFIRMED LOOSE IF IT CAN BE FELT TO MOVE AFTER BEING STRUCK ON THE SIDE OF THE HEAD IN A DIRECTION APPROXIMATELY PERPENDICULAR TO ITS SHANK WITH A 40 OZ HAMMER.
- REPLACE RIVET IF SECTION LOSS IS EQUAL TO OR GREATER THAN THE DIAGRAM SHOWN BELOW. THE ENGINEER SHALL BE CONSULTED IF UNCLEAR AS TO THE RIVET LOADING CONDITION OR USE THE SECTION LOSS CRITERIA FOR "UNKNOWN" LOADING CONDITION. FOR RIVETS WITH IRREGULAR SECTION LOSS, CONTACT THE ENGINEER FOR DIRECTION.



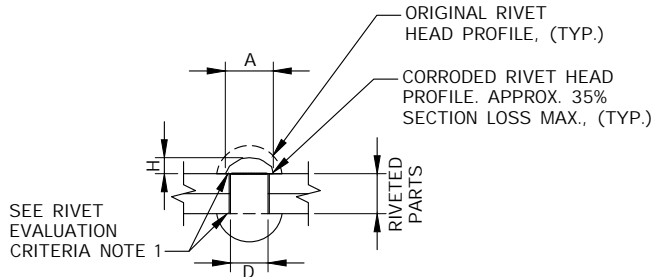
RIVET LOADING CONDITION 1
LOADING CONDITION - PRIMARILY SHEAR



RIVET SECTION A
LOADING CONDITION - PRIMARILY SHEAR



RIVET LOADING CONDITION 2
LOADING CONDITION - PRIMARILY TENSION, TENSION & SHEAR, OR UNKNOWN



RIVET SECTION B
LOADING CONDITION - PRIMARILY TENSION, TENSION & SHEAR, OR UNKNOWN

MINIMUM RIVET DIMENSIONS				
RIVET SHANK DIAMETER "D"	LOADING: PRIMARILY SHEAR		LOADING: TENSION & SHEAR, TENSION OR UNKNOWN	
	MINIMUM HEAD DIAMETER "A"	MINIMUM HEAD HEIGHT "H"	MINIMUM HEAD DIAMETER "A"	MINIMUM HEAD HEIGHT "H"
5/8"	7/8"	3/16"	1"	3/8"
3/4"	1"	1/4"	1 1/8"	7/16"
7/8"	1 1/8"	3/8"	1 1/4"	9/16"

Bridge Design Engr.	Leland, A.			REGION NO.	STATE	FED AID PROJ NO.
Supervisor	Banks, G.			10	WASH	
Designed By	Wu, J.					
Checked By	Murphy, S.					
Detailed By	Childress, L.			JOB NUMBER		
Bridge Projects Engr.	Rosa, M.			23Y006		
Prelim. Plan By						
Architect/Specialist		DATE	REVISION	BY		

BRIDGE AND STRUCTURES OFFICE



US 395 PIONEER MEMORIAL BRIDGE - BRIDGE PAINTING STAGE 2 BRIDGE NO. 395/40	
RIVET EVALUATION CRITERIA	

BRIDGE SHEET NO.	BA10
SHEET	14
OF	23
SHEETS	

LONGITUDINAL BUFFER SPACE = B											
SPEED (MPH)	20	25	30	35	40	45	50	55	60	65	70
LENGTH (feet)	115	155	200	250	305	360	425	495	570	645	730

MOBILE TRANSPORTABLE ATTENUATOR ROLL AHEAD DISTANCE = R					
HOST VEHICLE WEIGHT LESS THAN 22,000 lbs.			HOST VEHICLE WEIGHT 22,000+ lbs.		
UP TO 40 MPH	45-55 MPH	60+ MPH	UP TO 40 MPH	45-55 MPH	60+ MPH
100'	172'	222'	100'	150'	172'

SIGN SPACING = X (1)		
FREEWAYS & EXPRESSWAYS	50-75 MPH	1500' +/-
RURAL HIGHWAYS	60-70 MPH	800' +/-
RURAL ROADS	45-55 MPH	500' +/-
RURAL ROADS & URBAN ARTERIALS	35-40 MPH	350' +/-
RURAL ROADS & URBAN ARTERIALS RESIDENTIAL & BUSINESS DISTRICTS	25-30 MPH	200' +/- (2)
URBAN STREETS	25 MPH OR LESS	100' +/- (2)

(1) ALL SPACING MAY BE ADJUSTED TO ACCOMMODATE INTERCHANGE RAMPS, AT-GRADE INTERSECTIONS AND DRIVEWAYS.
(2) THIS SPACING MAY BE REDUCED IN URBAN AREAS TO FIT ROADWAY CONDITIONS.

MINIMUM LANE CLOSURE TAPER LENGTH = L												
LANE WIDTH	SPEED (MPH)	20	25	30	35	40	45	50	55	60	65	70
12'	L (feet)	80	140	180	270	330	540	600	680	720	800	840

MAXIMUM CHANNELIZATION DEVICE SPACING (feet)		
MPH	TAPER	TANGENT
50-70	40	80
35-45	30	60
20-30	20	40

PCMS

1

RIGHT LANE CLOSED

2.0 SEC

2

1.5 MILES AHEAD

2.0 SEC

FIELD LOCATE 1.5 +/- MILES PRIOR TO FIRST LANE CLOSURE TAPER.

LOCATE PCMS PER WSDOT STANDARD SPEC. 1-10.3(3)C.

SEE NOTE 4

LEGEND:

- TEMPORARY SIGN LOCATION
- TRAFFIC SAFETY DRUM
- SEQUENTIAL ARROW SIGN
- TRANSPORTABLE ATTENUATOR
- PORTABLE CHANGEABLE MESSAGE SIGN

SINGLE-LANE CLOSURE FOR MULTI-LANE ROADWAYS

NOT TO SCALE

NOTES

- SEE SPECIAL PROVISIONS FOR WORK HOUR RESTRICTIONS.
- EXTEND DEVICE TAPER AT L/3 ACROSS SHOULDER.
- DEVICES SHALL NOT ENCROACH INTO THE ADJACENT LANE.
- USE TRANSVERSE DEVICES IN CLOSED LANE EVERY 1000'(FT) (RECOMMENDED).
- DEVICE SPACING FOR THE DOWNSTREAM TAPER SHALL BE 20' (FT).
- ALL SIGNS ARE BLACK ON ORANGE UNLESS OTHERWISE INDICATED.

FILE NAME K:\454306\Projects\XL6475-US395_MP18.75-MP18.97_PaintIngS2\ICAD\ContractPlans_Alt\410-WZTCPlan\XL6475_PS_TC.dgn				FED.AID PROJ.NO.		DATE	DATE	Washington State Department of Transportation	US 395 PIONEER MEMORIAL BRIDGE - BRIDGE PAINTING STAGE 2	Plot 1
TIME 8:30:27 AM	DATE 4/20/2023	PLOTTED BY GunderC	DESIGNED BY C.GUNDERT	ENTERED BY C. GUNDERT	CHECKED BY P. COOPER					PROJ. ENGR. A. SANGUINO
REVISION							DATE	BY	SHEET 15 OF 23 SHEETS	

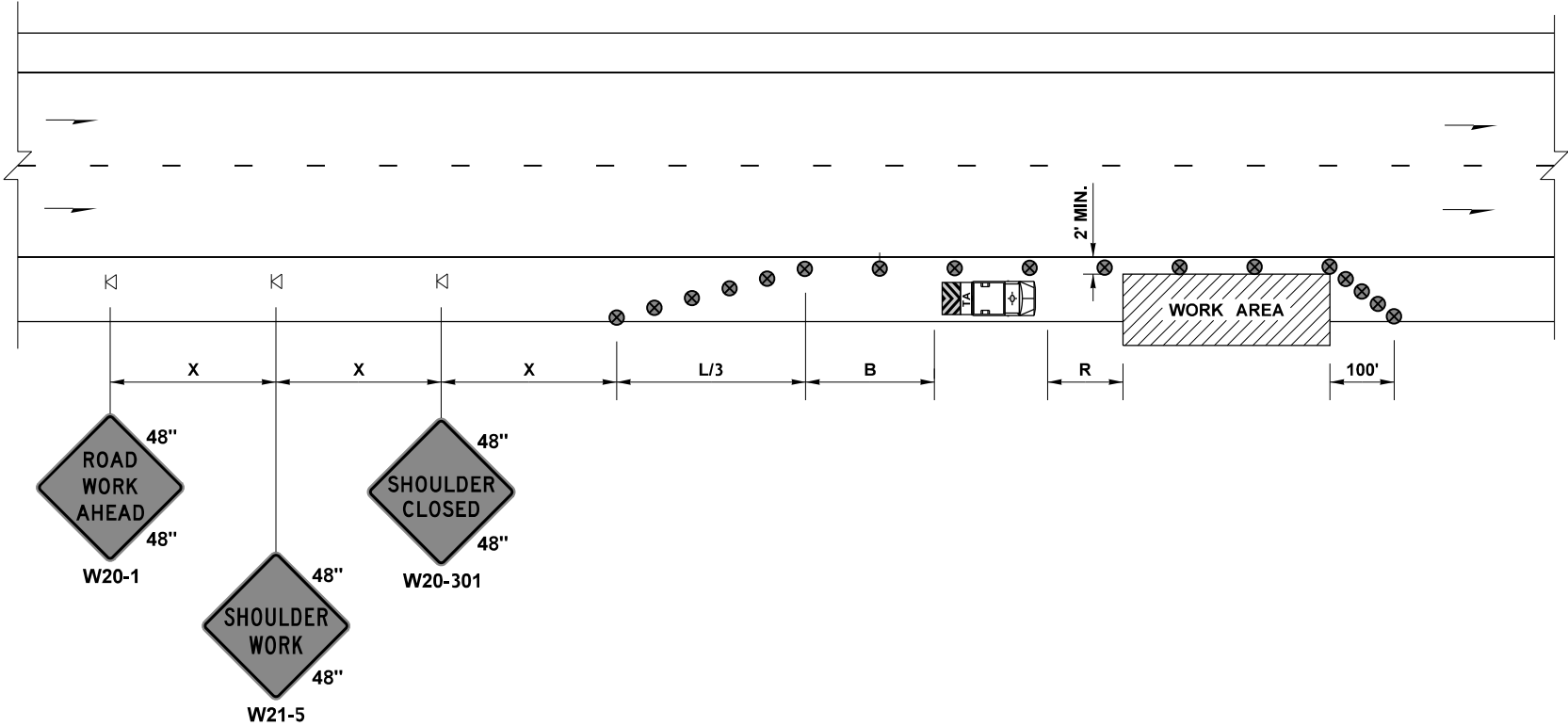
LONGITUDINAL BUFFER SPACE = B											
SPEED (MPH)	20	25	30	35	40	45	50	55	60	65	70
LENGTH (feet)	115	155	200	250	305	360	425	495	570	645	730

MOBILE TRANSPORTABLE ATTENUATOR ROLL AHEAD DISTANCE = R					
HOST VEHICLE WEIGHT LESS THAN 22,000 lbs.			HOST VEHICLE WEIGHT 22,000+ lbs.		
UP TO 40 MPH	45-55 MPH	60+ MPH	UP TO 40 MPH	45-55 MPH	60+ MPH
100'	172'	222'	100'	150'	172'

SIGN SPACING = X (1)		
FREEWAYS & EXPRESSWAYS	50-75 MPH	1500' +/-
RURAL HIGHWAYS	60-70 MPH	800' +/-
RURAL ROADS	45-55 MPH	500' +/-
RURAL ROADS & URBAN ARTERIALS	35-40 MPH	350' +/-
RURAL ROADS & URBAN ARTERIALS RESIDENTIAL & BUSINESS DISTRICTS	25-30 MPH	200' +/- (2)
URBAN STREETS	25 MPH OR LESS	100' +/- (2)
(1) ALL SPACING MAY BE ADJUSTED TO ACCOMMODATE INTERCHANGE RAMP, AT-GRADE INTERSECTIONS AND DRIVEWAYS.		
(2) THIS SPACING MAY BE REDUCED IN URBAN AREAS TO FIT ROADWAY CONDITIONS.		

SHOULDER CLOSURE TAPER LENGTH = L/3													
SHOULDER WIDTH	SPEED (MPH)	20	25	30	35	40	45	50	55	60	65	70	75
6'	L/3 (feet)	40	40	40	60	60	90	120	120	120	160	160	160
10'		40	40	60	90	90	150	200	200	200	240	240	280
FOR SHOULDERS LESS THAN 6', USE 3 DEVICES MINIMUM													

MAXIMUM CHANNELIZATION DEVICE SPACING (feet)		
MPH	TAPER	TANGENT
50-70	40	80
35-45	30	60
20-30	20	40



LEGEND:

TEMPORARY SIGN LOCATION

TRAFFIC SAFETY DRUM

TRANSPORTABLE ATTENUATOR

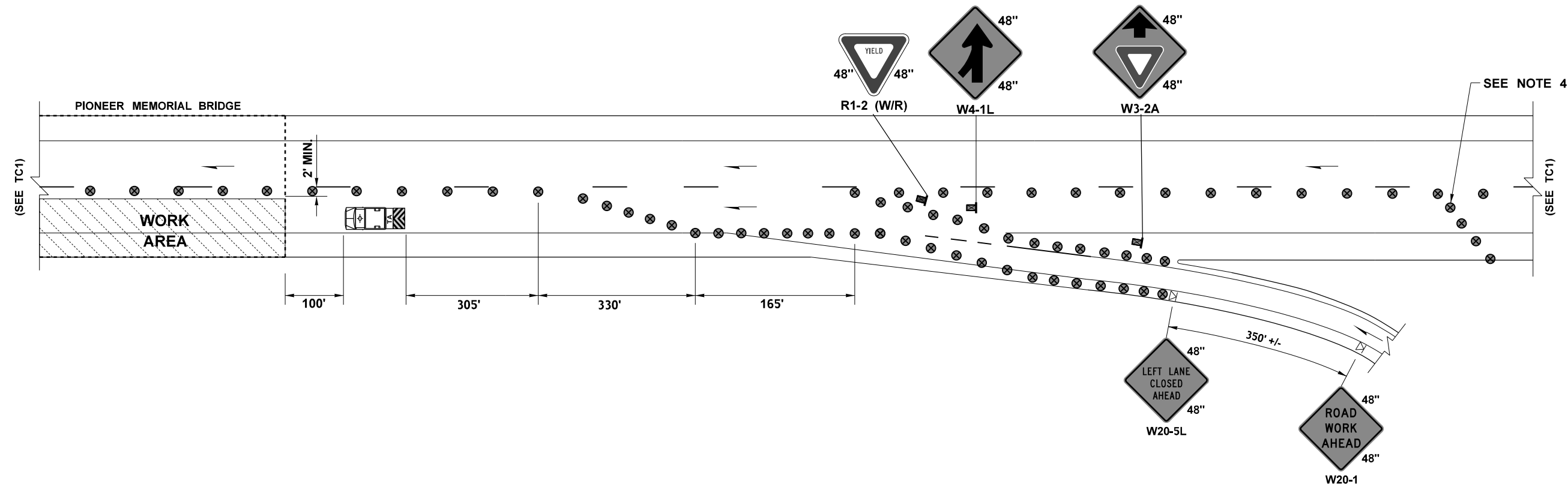
SHOULDER CLOSURE - HIGH SPEED

NOT TO SCALE

NOTES

1. NO ENCROACHMENT IN TRAVELED LANE. IF ENCROACHMENT IS NECESSARY, LANE SHALL BE CLOSED.
2. DEVICE SPACING FOR THE DOWNSTREAM TAPER SHALL BE 20' (FT) O.C.
3. ALL SIGNS ARE BLACK ON ORANGE UNLESS OTHERWISE INDICATED.

MAXIMUM CHANNELIZATION DEVICE SPACING (feet)		
MPH	TAPER	TANGENT
50-70	40	80
35-45	30	60
20-30	20	40



LEGEND:

- TEMPORARY SIGN LOCATION
- TEMPORARY SIGN LOCATION (5' MIN HEIGHT)
- TRAFFIC SAFETY DRUM
- TRANSPORTABLE ATTENUATOR
- PORTABLE CHANGEABLE MESSAGE SIGN

SINGLE-LANE CLOSURE FOR MULTI-LANE ROADWAYS
LEWIS STREET ON-RAMP

NOT TO SCALE

NOTES

- SEE SPECIAL PROVISIONS FOR WORK HOUR RESTRICTIONS.
- EXTEND DEVICE TAPER AT L/3 ACROSS SHOULDER (SEE TC1 FOR MINIMUM LANE CLOSURE TAPER LENGTH).
- DEVICES SHALL NOT ENCROACH INTO THE ADJACENT LANE.
- USE TRANSVERSE DEVICES IN CLOSED LANE EVERY 1000' (FT) (RECOMMENDED).
- DEVICE SPACING FOR THE DOWNSTREAM TAPER SHALL BE 20' (FT).
- ALL SIGNS ARE BLACK ON ORANGE UNLESS OTHERWISE INDICATED.

FILE NAME										K:\454306\Projects\XL6475-US395_MP18.75-MP18.97_PaintingS2\CAD\ContractPlans_Alt410-WZTCPlan\XL6475_PS_TC.dgn																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
-----------	--	--	--	--	--	--	--	--	--	---	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

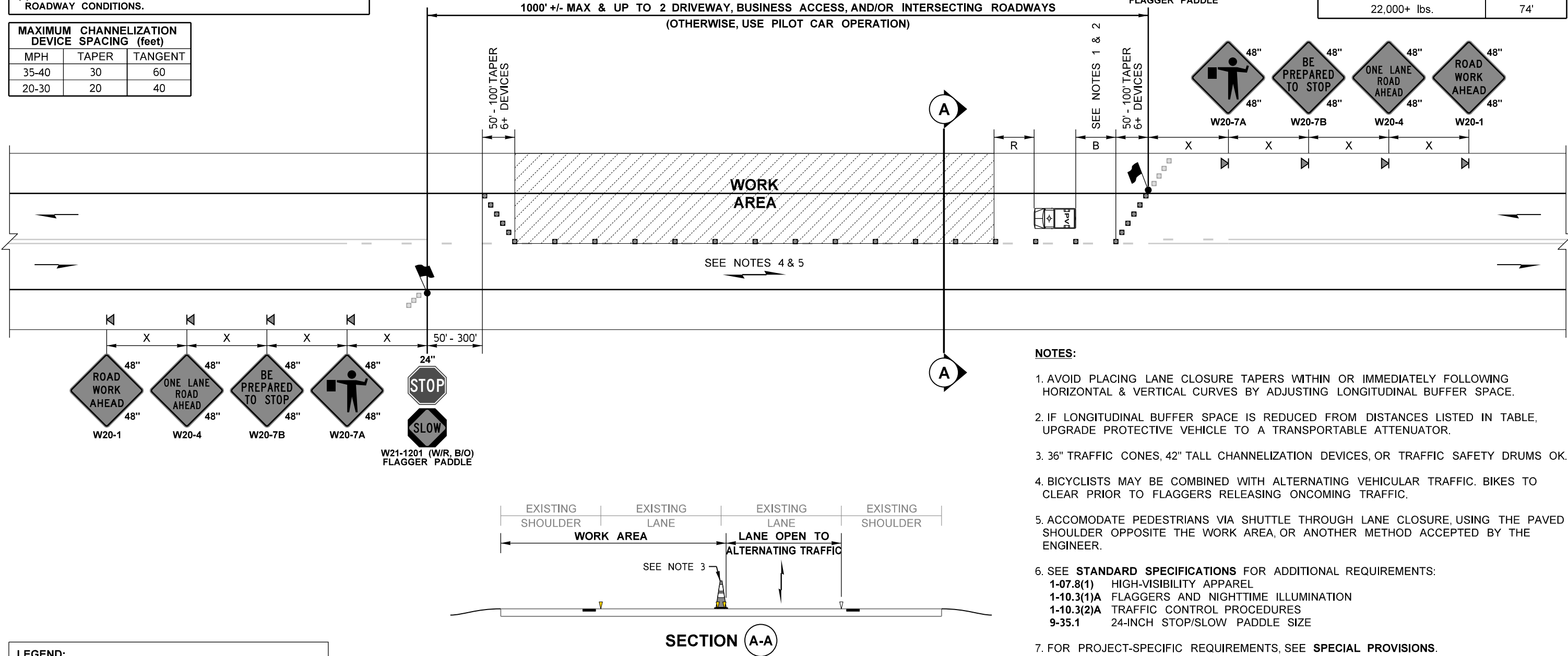
SIGN SPACING = X (1)		
RURAL ROADS & URBAN ARTERIALS	35-40 MPH	350' +/-
RURAL ROADS & URBAN ARTERIALS RESIDENTIAL & BUSINESS DISTRICTS	25-30 MPH	200' +/- (2)
URBAN STREETS	25 MPH OR LESS	100' +/- (2)
(1) ALL SPACING MAY BE ADJUSTED TO ACCOMMODATE INTERCHANGE RAMPS, AT-GRADE INTERSECTIONS AND DRIVEWAYS. (2) THIS SPACING MAY BE REDUCED IN URBAN AREAS TO FIT ROADWAY CONDITIONS.		

MAXIMUM CHANNELIZATION DEVICE SPACING (feet)		
MPH	TAPER	TANGENT
35-40	30	60
20-30	20	40

LONGITUDINAL BUFFER SPACE = B					
SPEED (MPH)	20	25	30	35	40
LENGTH (feet)	115	155	200	250	305

PROTECTIVE VEHICLE ROLL AHEAD DISTANCE = R	
NO SPECIFIED DISTANCE REQUIRED. STRATEGICALLY POSITION WORK VEHICLE TO PROTECT WORK CREW.	

STATIONARY TRANSPORTABLE ATTENUATOR ROLL AHEAD DISTANCE = R	
HOST VEHICLE WEIGHT	R
LESS THAN 22,000 lbs.	100'
22,000+ lbs.	74'




- NOTES:**
1. AVOID PLACING LANE CLOSURE TAPERS WITHIN OR IMMEDIATELY FOLLOWING HORIZONTAL & VERTICAL CURVES BY ADJUSTING LONGITUDINAL BUFFER SPACE.
 2. IF LONGITUDINAL BUFFER SPACE IS REDUCED FROM DISTANCES LISTED IN TABLE, UPGRADE PROTECTIVE VEHICLE TO A TRANSPORTABLE ATTENUATOR.
 3. 36" TRAFFIC CONES, 42" TALL CHANNELIZATION DEVICES, OR TRAFFIC SAFETY DRUMS OK.
 4. BICYCLISTS MAY BE COMBINED WITH ALTERNATING VEHICULAR TRAFFIC. BIKES TO CLEAR PRIOR TO FLAGGERS RELEASING ONCOMING TRAFFIC.
 5. ACCOMODATE PEDESTRIANS VIA SHUTTLE THROUGH LANE CLOSURE, USING THE PAVED SHOULDER OPPOSITE THE WORK AREA, OR ANOTHER METHOD ACCEPTED BY THE ENGINEER.
 6. SEE **STANDARD SPECIFICATIONS** FOR ADDITIONAL REQUIREMENTS:
1-07.8(1) HIGH-VISIBILITY APPAREL
1-10.3(1)A FLAGGERS AND NIGHTTIME ILLUMINATION
1-10.3(2)A TRAFFIC CONTROL PROCEDURES
9-35.1 24-INCH STOP/SLOW PADDLE SIZE
 7. FOR PROJECT-SPECIFIC REQUIREMENTS, SEE **SPECIAL PROVISIONS**.
 8. SIGNS ARE BLACK ON ORANGE UNLESS OTHERWISE INDICATED.
 9. ACTUAL CENTERLINE PAVEMENT MARKINGS MAY VARY.

LEGEND:	
	TEMPORARY SIGN LOCATION
	28" REFLECTIVE TRAFFIC CONE (SEE NOTE 3)
	OPTIONAL CHANNELIZATION DEVICE
	PROTECTIVE VEHICLE (SEE NOTE 2)
	FLAGGER

ALTERNATING 1-LANE, 2-WAY TRAFFIC: FLAGGER-CONTROLLED
COLUMBIA PARK TRAIL

NOT TO SCALE

FILE NAME K:\454306\Projects\XL6475-US395_MP18.75-MP18.97_PaintIngS2\CAD\ContractPlans_Alt410-WZTCPlan\XL6475_PS_TC.dgn																US 395		Plot 5	
TIME 8:30:28 AM							REGION NO. STATE		FED.AID PROJ.NO.						PIONEER MEMORIAL BRIDGE -		PLAN REF NO		
DATE 4/20/2023							10 WASH								TC5				
PLOTTED BY GunderC							JOB NUMBER										SHEET		
DESIGNED BY C.GUNDERT							23Y006										19		
ENTERED BY C. GUNDERT							CONTRACT NO.		LOCATION NO.								OF		
CHECKED BY P. COOPER																	23		
PROJ. ENGR. A. SANGUINO																	SHEETS		
REGIONAL ADM. C. KEIFENHEIM		REVISION			DATE		BY				P.E. STAMP BOX		DATE		P.E. STAMP BOX		DATE		

PCMS		
1	2	3
RIGHT LANE CLOSURE	40 MPH ZONE AHEAD	SLOW TRAFFIC AHEAD
1.5 SEC	1.5 SEC	1.5 SEC

FIELD LOCATE 1.5 +/- MILES PRIOR TO FIRST LANE CLOSURE TAPER.

REMOVE PHASE 3 WHEN TRAFFIC QUEUES NO LONGER PRESENT. INCREASE DISPLAY TO 2.0 SEC.

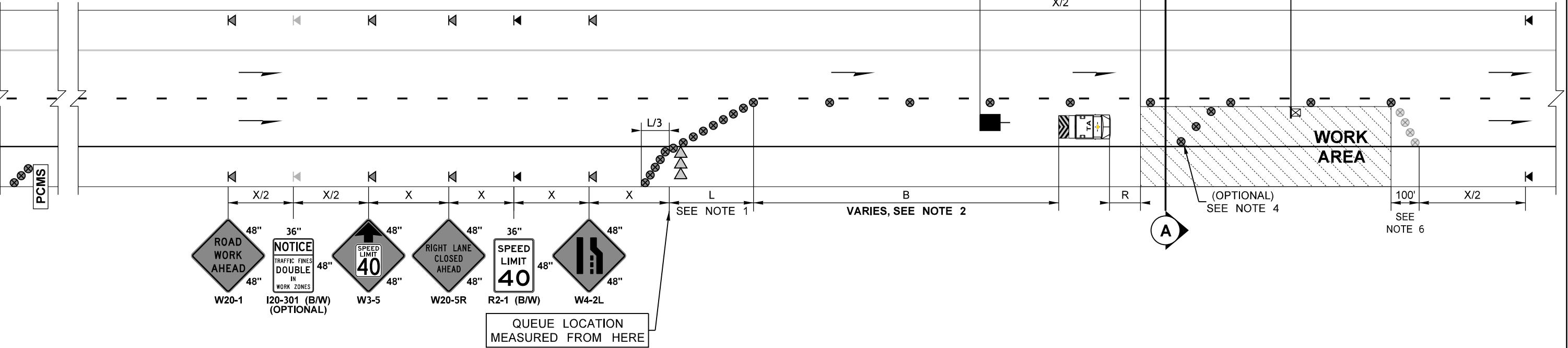
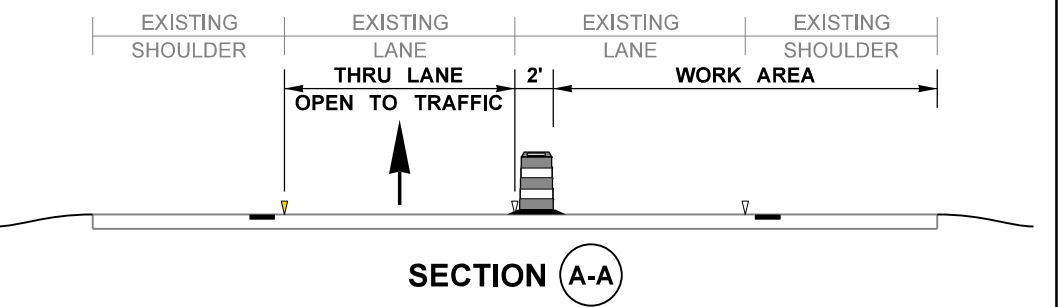
LOCATE PCMS PER WSDOT STANDARD SPEC. 1-10.3(3)C.

SIGN SPACING = X (1)		
RURAL HIGHWAYS	60-70 MPH	800' +/-
RURAL ROADS	45-55 MPH	500' +/-
RURAL ROADS & URBAN ARTERIALS	35-40 MPH	350' +/-
RURAL ROADS & URBAN ARTERIALS RESIDENTIAL & BUSINESS DISTRICTS	25-30 MPH	200' +/- (2)
URBAN STREETS	25 MPH OR LESS	100' +/- (2)
(1) ALL SPACING MAY BE ADJUSTED TO ACCOMMODATE INTERCHANGE RAMP, AT-GRADE INTERSECTIONS AND DRIVEWAYS.		
(2) THIS SPACING MAY BE REDUCED IN URBAN AREAS TO FIT ROADWAY CONDITIONS.		

LONGITUDINAL BUFFER SPACE = B											
SPEED (MPH)	20	25	30	35	40	45	50	55	60	65	70
LENGTH (feet)	115	155	200	250	305	360	425	495	570	645	730

MINIMUM LANE CLOSURE TAPER LENGTH = L												
LANE WIDTH	SPEED (MPH)	20	25	30	35	40	45	50	55	60	65	70
12'	L (feet)	80	140	180	270	330	540	600	680	720	800	840

STATIONARY TRANSPORTABLE ATTENUATOR ROLL AHEAD DISTANCE = R	
HOST VEHICLE WEIGHT	R
LESS THAN 22,000 lbs.	100'
22,000+ lbs.	74'



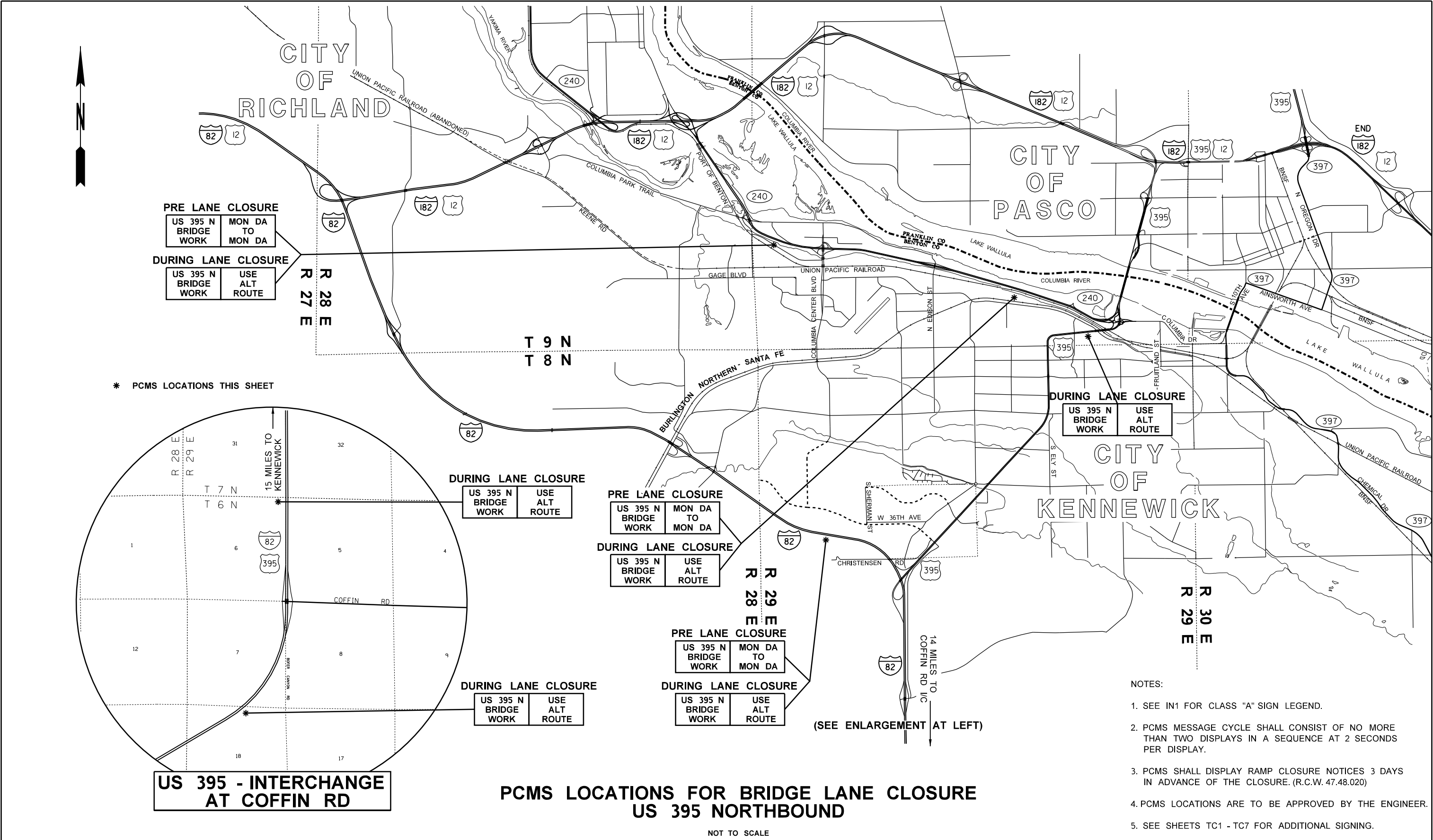
NOTES:

- IF FEASIBLE, AVOID PLACING LANE CLOSURE OR LANE SHIFT TAPERS WITHIN OR IMMEDIATELY FOLLOWING HORIZONTAL CURVES.
- DISTANCE INCREASES AS WORK AREA MOVES DOWNSTREAM.
- RELOCATE RSDS AS WORK AREA MOVES DOWNSTREAM. ENGINEER MAY ORDER ADDITIONAL RSDS (WITH R2-1) PRIOR TO EACH WORK CREW WITHIN WORK AREA.
- IF USED, PLACE DEVICES TRANSVERSELY ACROSS CLOSED LANES AT 45° +/- AND 5' SPACING AT STRATEGIC LOCATIONS.
- COVER ALL CONFLICTING SIGNAGE PER STANDARD SPEC 8-21.3(3).
- DOWNSTREAM TAPER OPTIONAL ACROSS RIGHT LANE. DOWNSTREAM TAPER DEVICE SPACING IS 20'.
- SIGNS OPTIONAL IF EXISTING SPEED LIMIT SIGNS PRESENT WITHIN 1500' +/- FOLLOWING THE DOWNSTREAM TAPER.
- ADD "TRUCKS LEAVING HIGHWAY" AND "TRUCKS ENTERING HIGHWAY" (W21-30, 48"x48", 5' HEIGHT) SIGNS 500' +/- PRIOR TO WHERE CONSTRUCTION VEHICLES FREQUENTLY EXIT AND ENTER INTO THE OPEN LANE(S).
- SIGNS ARE BLACK ON ORANGE UNLESS OTHERWISE INDICATED.
- PLAN IS APPLICABLE TO LANE CLOSURES OF 3 DAYS OR LESS.
- BICYCLES PROHIBITED THROUGH WORK ZONE; CONSIDER PROVIDING DETOUR, ALTERNATIVE ROUTE, OR SHUTTLE IN HIGH-USE LOCATIONS PERMITTING PERMANENT BICYCLE ACCESS.


LEGEND:	
	TEMPORARY SIGN LOCATION
	TEMPORARY SIGN LOCATION (5' MIN HEIGHT)
	TRAFFIC SAFETY DRUM
	RADAR SPEED DISPLAY SIGN (RSDS)
	SEQUENTIAL ARROW SIGN
	TRANSPORTABLE ATTENUATOR
	PORTABLE CHANGEABLE MESSAGE SIGN

SINGLE RIGHT LANE CLOSURE
(40 MPH WORK ZONE SPEED LIMIT)
NOT TO SCALE

FILE NAME	K:\454306\Projects\XL6475-US395_MP18.75-MP18.97_PaintingS2\CAD\ContractPlans_Alt\410-WZTCPlan\XL6475_PS_TC.dgn	FED.AID PROJ.NO.		DATE		DATE		Washington State Department of Transportation		US 395 PIONEER MEMORIAL BRIDGE - BRIDGE PAINTING STAGE 2		Plot 7 PLAN REF NO TC7
TIME	8:30:29 AM	REGION NO.	STATE	10	WASH							SHEET 21 OF 23 SHEETS
DATE	4/20/2023	JOB NUMBER	CONTRACT NO.	23Y006								
PLOTTED BY	GunderC	LOCATION NO.										
DESIGNED BY	C.GUNDERT											
ENTERED BY	C. GUNDERT											
CHECKED BY	P. COOPER											
PROJ. ENGR.	A. SANGUINO											
REGIONAL ADM.	C. KEIFENHEIM	REVISION	DATE	BY								



- NOTES:
- SEE IN1 FOR CLASS "A" SIGN LEGEND.
 - PCMS MESSAGE CYCLE SHALL CONSIST OF NO MORE THAN TWO DISPLAYS IN A SEQUENCE AT 2 SECONDS PER DISPLAY.
 - PCMS SHALL DISPLAY RAMP CLOSURE NOTICES 3 DAYS IN ADVANCE OF THE CLOSURE. (R.C.W. 47.48.020)
 - PCMS LOCATIONS ARE TO BE APPROVED BY THE ENGINEER.
 - SEE SHEETS TC1 - TC7 FOR ADDITIONAL SIGNING.

FILE NAME K:\454306\Projects\XL6475-US395_MP18.75-MP18.97_PaintingS2\CAD\ContractPlans_Alt410-WZTCPlan\XL6475_PS_PCMS-working.dgn														 Washington State Department of Transportation		US 395		Plot 2	
TIME 8:30:41 AM								REGION NO. STATE								FED.AID PROJ.NO.		PLAN REF NO	
DATE 4/20/2023								10 WASH						TC8					
PLOTTED BY GunderC								JOB NUMBER								SHEET			
DESIGNED BY C. GUNDERT								23Y006								22			
ENTERED BY C. GUNDERT								CONTRACT NO.		LOCATION NO.						OF			
CHECKED BY P. COOPER																23			
PROJ. ENGR. A. SANGUINO																SHEETS			
REGIONAL ADM. C. KEIFENHEIM				REVISION		DATE		BY						TRAFFIC CONTROL PLAN					

